STIC-Biotech/ChemLib



From: Gent:

Parkin, Jeffrey

Thursday, May 15, 2003 6:41 PM STIC-Biotech/ChemLib

To: Subject: U.S. Serial No. 09/623,533

RECEIVED

MAY 16 2000

Please search **SEQ ID NOS.:** 1, 3, 4, 5, 117, 118, 119, 534, 535, 536, 537, 538, 540, and 541 from the aformentioned application (09/623,533) v. all relevant databases including interference. Please note that these sequences are all close variations of the same parent peptide.

Place results on both paper and disk.

Thanks!

JSP AU 1648 CM01-8E15 308-2227

roint of Contact: **Toby Port** Technical Info. Specialist CM1 6A04 703-308-3534

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Searcher:	
Phone:	
Location:	
Date Picked Up: 5/16	
Date Completed: 15/19	
Searcher Prep/Review:	
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TYPE OF SEARCH:
NA Sequences:
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Structures:
Bibliographic:
Litigation:
Full text:
Patent Family:
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VENDOR/COST (where a	applic.)
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Q8u178	Q8u182	Q8u183	Q8u184	Q8q850	Q8u173	Q8u177	Q8u179	Q8u180	Q8u185	Q8u188	Q8u190	Q8u170	041539	Q72993	. 08d82	056110	. Q8q851	Q77368	041556	Q80023	Q69910	203805	Q78225	203806	066690	Q9q722	Q993b2	045660
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1 TSLIHSLIEESQNOQEKNEQELLELDKWASLWNWF 35 	Query Match 100.0%; Score 188; DB 15; Length 645; Best Local Similarity 100.0%; Pred. No. 8.8e-15; Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps	Transmembrane. NON_TER 1 1 SEQUENCE 645 AA; 72485 MW; B076514BE93362EC CRC64;				, Processing."; , Proc. Natl. Acad. Sci. U.S.A. 98:4587-4592(2001).	HIV envelope glycoprotein suggests structural	-	White S.W., Doherty P.C., Hurwitz J.L.;			SEQUENCE FROM N.A.	NCBI_TaxID=11676;			ENV.		01-JUN-2001		0993A6;	D 0993A6 PRELIMINARY: PRT: 645 AA
	0;																				

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RESULT 2
Q70607
ID Q706
AC Q706
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DE ENV-
GN ENV.
OS Huma
OC Viru
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RP SEQU
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Q70607;
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Shaw G., Kong L., Weiss S., Waters D., Gallo R., B
"Viral variability and serum antibody response in
infected with HIV type I (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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EMBL; U12034; AAA76669.1; -.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GeP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 747 747
SEQUENCE 747 AA; 84250 MW; 732E836A52245F14 CRC64;
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MEDINE-95127297; PubMed-7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.;
"Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Viruses; Retroid viruses; Retroviridae;
RCBI_TaxID=11676;
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Envelope glycoprotein (Fragment).
Mulder K.E.; submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases EMBL; U12032; AAA76668.1; -.
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MEDLINE-95127297; PubMed=7826699;
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MEDLINE-95127297; Pagenonse in a laboratc
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NCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae;
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Pfam; PF00517; GP41; 1.

AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.

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EMBL; U12030; AAA7666.1; ...
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 752
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IPR000777; GP120.
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.;
"Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                 Interpro; IPR000328; Env GP41.
Interpro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 752
752
SEQUENCE 752 AA; 84894 MW; 8B30AE894013B45A CRC64;
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                                                                                                                                                                                                      Coat protein; Glycoprotein; Polyprotein; Transmembrane. ER 752 752
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0; Mismatches
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Q89797;
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Q78243;
Q1-NOV-1996
MEDLINE-95127297; PubMed-7826699, Reitz M., Hall L., Robert-Guroff Shaw G., Kong L., Weiss S., Water "Viral variability and serum anti
                                                                                                     STRAIN=LW90-
                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                          Viruses; Retroid
NCBI_TaxID=11676;
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"Variability of HIV-1 virus:
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                         Robert-Guroff M., Weiss S., Waters D
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Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS: Coat protein; Glycoprotein; Polyprotein; Transmembrane.
SEQUENCE 851 AA; 96630 MW; 1A3767B9B7E98027 CRC64;
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                                                                                                                                                          Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Biological and molecular characterization of producer a producer clones from HUT-78 infected with a patient HIV AIDS Res. Hum. Retroviruses 5:385-396(1989).
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MEDLINE=89352106; PubMed=2765297;
Federico M., Titti F., Butto S., Orecchia
Macchi B., Mangiano N., Verani P., Rossi
"Biological and molecular characterizatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae; NCBI_TaxID=11676;
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Last annotation updat
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Pred. No. 1.2e-14;
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Lautenberger J., Hahn
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Dai L.C., Littan
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Submitted
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Submitted
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Envelope protein;
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InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (JUL-1994) to the EMBL; U12053; AAA76685.1; -EMBL; U12036; AAA76671.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                       MEDLINE=92219406; Furney Tokahashi K., Dai L.C., Littaua R., Takahashi K., "Mutation of human immunodeficiency" Mutation of human immunodeficiency
                                                                                                                                                                                                                                                SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                     Envelope
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AIDS Res. Hum. Retroviruses
                                                                                          J. Virol. 66:3151-3154(1992).
EMBL; M19921; AAA44992.1; -.
                                                                                                                                                                                                                                                                                        "Production of acquired retrovirus in human and
                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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                                                                     InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                         SEQUENCE FROM N.A.
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ymphocytes.";
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nes 35; Conser
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  Similarity
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H
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854 AA;
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                               Glycoprotein; Polyprotein; Transmembrane 97124 MW; ABA0A1BF36D5595A CRC64;
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ruses 10:1143-1155(1994).
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Last annotation update)
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Pred. No. 1.2e-14;
Mismatches 0;
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Pred.
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virus type 1 at amino acid 585
CD8+ A24-restricted cytotoxic 7
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          188;
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transfected with an i
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Matches 35
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InterPro; IFN\(\)077\, \
InterPro; IFR00077\, \
Pfam; PF00510; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Po
AIDS; Coat protein; 214\(\)opprotein; Po
ONELICT 244 H -> L
ONELICT 30 530 A -> ;
739 G -> ;
730705 MW; FF
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Q72502;
01-NOV-1996 (TrEMBLrel. 0
01-NOV-1996 (TrEMBLrel. 0
01-DEC-2001 (TrEMBLrel. 1
                                                                                 O92877 PRELIMINARY: 092877: 01-NOV-1998 (TremBLrel. 0 01-NOV-1998 (TremBLrel. 0 01-DEC-2001 (TremBLrel. 1
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Michael N.L., Carr J.K., Burke D.S., McCutchan F.
"Recovery of virtually full-length HIV-1 provirus
                             Viruses; Retroid
NCBI_TaxID=57667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-NL4
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Virology 213:80-86(1995).
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Viruses; Retroid viruses; Retroviridae;
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SEQUENCE FROM N.A. MEDLINE=99098984;
                                                    Simian-Human immunodeficiency
                                                                        Envelope
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EMBL; U26942; AAB60578.1; -
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l Similarity 100.0%;
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                                          viruses;
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                                                    virus
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-> L (IN REF. 2).
-> S (IN REF. 2).
-> D (IN REF. 2).
FF2264B3841D1220 CRC64;
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane. SEQUENCE 856 AA; 97151 MW; C50BE0388FB73659 CRC64;
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Sodroski J
                                                                                                                                                  Submitted (JUN-1996) to the EMBL/GenBank/DDBJ EMBL; D86068; BAA12995.1; -
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein;
                                                                                                                                                                                                                                                                                         "Spectrum of Biological Properties (HIV-1) Isolates.";
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01-DEC-2001
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                                                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                                                 Virology 174:103-116(1990).
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                                                                                                                                                                                                                                                                                                                                                                       Viruses; Retroid
NCBI_TaxID=11676;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Changes in human immunodeficiency virus responsible for the pathogenicity of a muindunodeficiency virus (SHIV-HXBc2).";
J. Virol. 73:976-984(1999).
                                                                                                                                                                                                                                                                                                                                         STRAIN=MCK1
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                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
                                                                                                                                                                                                                                                                                                                           MEDLINE=90101366; PubMed=1688473;
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                                                 639
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e_T., Halloran M., 1
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ilarity 100.0%;
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                                                                                                                                       Glycoprotein; Polyprotein; Transmembrane 97287 MW; 238042A234C56685 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                01,
19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , Etemad-Moghadam B.A., Hofmann W.,
Fanton J.W., Axthelm M.K., Letvin N.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
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Pred. No. 1.2e-14;
                                                                                                    Score 188; DB 15;
Pred. No. 1.2e-14;
                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                     of Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             856
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on update)
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                                                                                                                 856;
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Best Local :
          InterPro; IPR000328; I
InterPro; IPR000777; (
Pfam; PF00516; GP120;
Pfam; PF00517; GP41; J
AIDS; Coat protein; Gl
                                                                                                                                                                                                                                                                                                   090178
090178;
01-NOV-1998
01-NOV-1998
01-DEC-2001
                                                                                                                                                              selected infected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1996
01-NOV-1996
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q74090
Q74090;
                                immunotoxin-resistant variant T cell line.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ
EMBL; AF070521; AAC28452.1; -
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
                                                                                                               SEQUENCE FROM N.A. Fang H., Pincus S.H.;
                                                                                                                                                                                                                                           Viruses; Retroid
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                 ENV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (JUN-1996) to the EMEL; D86069; BAA13003.1; -
INTERPRO; IPRO00328; EDV GP41.
InterPro; IPRO00777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=90101366; PubMed=1688473; Cloyd M.W., Moore B.E.; "Spectrum of Biological Properties"
                                                                                                                                                                                                          MEDLINE=95074930;
                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                        Envelope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-PM213;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Viruses;
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                                                                                                                                                                                   "Unique insertion sequence
                                                                                                                                                                                               Fang
                                                                                                                                                                                                                                                                   Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-PM213;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Virology
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                                                                                        Spontaneous activation of human immunodeficiency virus immunotoxin-resistant variant T cell line.";
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                                                                                                                                                                                                                                                                                                                                                                                                          639
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; PF00517; GP41; 1.
; Coat protein; Glycop
ENCE 856 AA; 97396
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
35; Conserv
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                                                                                                                                                                                              Pincus
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 protein;
854 AA;
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                                                                                                                                                                                                                                                        viruses;
                                                                                                                                                                                                         PubMed=7983770;
Glycoprotein;
96885 MW; 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein; Polyprotein; Transmembrane 97396 MW; FE3E784C423C108C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to the EMBL/GenBank/DDBJ
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                                                                                                                                                                      and pattern of CD4 expression in variants from human immunodeficiency virus type 1-
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
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Last annotation update)
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Last annotation
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Pred. No. 1.2
D; Mismatches
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.n; Polyprotein; 0808F3AED27C693B
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No. 1.2e-14;
0;
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          Transmembrane
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Gaps

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SEQUENCE

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RESULT 15
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                                                                                                                                                                                         SEQUENCE FROM N.A.

MEDIINE=96013815; pubmed=7474132;

X MEDIINE=96013815; pubmed=7474132;

A Duensing T. D., Fang H., Dorward D.W., Pincus S.H.;

Processing of the envelope glycoprotein gp160 in immunotoxin-

"Processing of the envelope glycoprotein gp160 in immunotoxin-

"resistant cell lines chronically infected with human immunodeficiency

"virus type 1.";

L J. Virol. 69:7122-7131(1995).

R EMBL; L42371; AAA96336.1; -.

R EMBL; L42371; AAA96336.1; -.

R InterPro; IPR000328; Env_GP41.

BR InterPro; IPR000777; GP120.

R Pfam; PF00516; GP120; 1.

R Pfam; PF00516; GP120; 1.

R Pfam; PF00517; GP41; 1.

NAIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.

SEQUENCE 854 AA; 97199 MW; 589512216533E256 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 97.9
Best Local Similarity 97.1
Matches 34; Conservative
                                                                                                Query Match 97.9%;
Best Local Similarity 97.1%;
Matches 34; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q78705 PRELIMINARY; PRT; 854 AA.
Q78705; O1-NOV-1996 (TrEMBLrel. 01, Created)
O1-NOV-1996 (TrEMBLrel. 19, Last sequence update)
O1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Envelope glycoprotein gp120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TSLIHSLIEESQNQOEKNEQELLELDKWASLWNWF 35
- 1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.9%;
97.1%;
                                                                                                Score 184; DB 15; Length 854; Pred. No. 3.6e-14; 1; Mismatches 0; Indels
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Pred. No. 3.6e-14;
1; Mismatches 0;
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Earch completed: May 16, 2003, 11:19:45 time: 26.5835 secs

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Result
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Maximum
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Maximum Match 100%
Listing first 45 summaries
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1: /cgn2_6/ptodata/1

2: /cgn2_6/ptodata/1

3: /cgn2_6/ptodata/1

4: /cgn2_6/ptodata/1

5: /cgn2_6/ptodata/1

6: /cgn2_6/ptodata/1
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length: 2000000000
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188
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Match
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Gapop 10.0 , Gapext 0.5
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103.919 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/BCTUS_COMB.pep:*
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US-08-484-223B-234
US-09-082-279B-638
US-09-082-279B-638
US-09-082-279B-638
US-09-315-304B-799
US-08-486-099-1
US-08-486-099-1
US-08-484-223B-1
US-08-484-223B-1
US-08-484-223B-1
US-08-484-223B-1
US-08-484-23B-1
US-08-484-23B-1
US-08-485-551A-1
US-08-485-551A-1
US-08-485-254A-1
US-08-485-279B-15
US-09-082-279B-498
US-09-082-279B-631
US-09-082-279B-631
US-09-082-279B-631
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US-08-484-223B-2
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                                                              Sequence 74, Appl
Sequence 73, App
Sequence 74, Appl
Sequence 79, App
Sequence 416, App
Sequence 416, App
Sequence 1, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 17, Appli
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Sequence 18, Appli
Sequence 19, Appli
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4 [
JS-09-315-304B-630	JS-09-315-304B-603	JS-09-315-304B-561	JS-09-315-304B-498	JS-09-315-304B-497	JS-09-315-304B-15	US-08-474-349A-413	US-08-474-349A-400	US-08-474-349A-399	US-08-474-349A-1	US-09-045-920-1	US-08-965-056-108	US-08-965-056-1	US-09-082-279B-1161	US-09-082-279B-1121	JS-09-082-279B-1076	US-09-082-279B-834	JS-09-082-279B-705
Sequence 630, App	Sequence 603, App	Sequence 561, App	498	497	Sequence 15, Appl	Sequence 413, App	Sequence 400; App	Sequence 399, App		Sequence 1, Appli	Sequence 108, App	Sequence 1, Appli	Sequence 1161, Ap	•	Sequence 1076, Ap	Sequence 834, App	-

ALIGNMENTS

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Qy
                                                                                                                                                 ; MOLECULE TYPE: peptide US-08-073-028-74
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US-08-073-028-74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 74, Application US/08073028 Patent No. 5464933 GENERAL INFORMATION:
                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                      TELEFAX: (212) 869-886.
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 35 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura A.
REGISTRATION NUMBER: 30,7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Bolognesi, Dani P.
APPLICANT: Matthews, Thomas J.
APPLICANT: Wild, Carl T.
TITLE OF INVENTION: SYNTHETIC
TITLE OF INVENTION: TRANSMISSI
                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1155 Ave
CITY: New York
STATE: New York
                                                                          Local Similarity
les 35; Conserv
                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/073,028 FILING DATE: 07-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 10036
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                                   1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                        Score 188; DB 1;
Pred. No. 7.3e-17;
                                                                          Mismatches
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US-08-554-616-74
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                                                                                                                                                         Sequence 74, Application US/08554616 Patent No. 6133418
                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 35; Conservative 0;
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MEDIUM TYPE: Floppy
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CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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                CORRESPONDENCE ADDRESS
                               TITLE OF INVENTION: SYNTHETIC PERTITLE OF INVENTION: TRANSMISSION NUMBER OF SEQUENCES: 74
                                                                                    APPLICANT: Bolognesi, Dani P. APPLICANT: Matthews, Thomas J. APPLICANT: Wild, Carl T.
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS
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ADDRESSEE:
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Coruzzi, Laura A.
Coruzzi, Saura A.
70 NUMBER: 30,742
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1155 Avenue of the Americas
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(212) 869-9741/8864
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Langlois, Alphonse J
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Pennie & Edmonds
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                                                                     SYNTHETIC PEPTIDE INHIBITORS OF HIV
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; Sequence 638, Application US/09082279B
; Patent No. 6258782
                                                                    US-09-082-279B-638
                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/082,279B CURRENT FILING DATE: 1998-05-20 NUMBER OF SEQ ID NOS: 1515 SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 638 LENGTH: 35
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Matches
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                                   Query Match
Best Local Similarity
Matches 35; Conserv
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
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                                                                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                       TYPE: PRT
                                                                                    OTHER INFORMATION: Core polypeptide
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ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
CURRENT APPLICATION DATA:
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TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
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APPLICATION NUMBER:
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Merutka, Gene
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 100.0%; Score 188; DB 4; illarity 100.0%; Pred. No. 7.3e-17. Conservative 0; Mismatches 0
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07-JUN-1993
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US-09-082-279B-799

Sequence 799, Application US/09082279B Patent No. 6258782

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1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35

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Best Local S
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LENGTH: 35
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARP OF SEQ ID NOS: 1515
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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                                                                                                                                                                                   COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/474,349A
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TITLE OF INVENTION:
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                                  ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
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                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
              NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                           CITY: New York
STATE: New York
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REFERENCE/DOCKET NUMBER:
                                                                    CLASSIFICATION:
                                                                                      FILING DATE:
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Guthrie, Kelly
Merutka, Gene
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Petteway, Stephen R.
Langlois, Alphonse J
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                                                                                     07-JUN-1995
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                                                                                                                                                                                                                                            US-09-315-304B-799
                                                                                                                                                                                                                                                                 RESULT 8
                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                        Sequence 799, Application US/09315304B Patent No. 6348568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 638
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APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
                                                                                                                             APPLICANT: Barney, S. APPLICANT: Guthrie, K. APPLICANT: Merutka, G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/082,279
PRIOR ETLING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
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                                                                                              APPLICANT:
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Core polypeptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: unknown MOLECULE TYPE: peptide
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LENGTH: 35 amino acids
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TELEFAX: 66141 PENNIE
TELEX: 66141 PENNIE
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                                                                                                               Anwer, M.
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100.0%; Pred. No. 7.3e-17;
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Pred. No. 7.3e-17
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Best Local Similarity
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                                                                  Matches
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Patent No. 546493
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                                                                                                Query Match
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SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-05-20
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/073,028
FILING DATE: 07-UN-1993
CLASSIFICATION: 514
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Bolognesi, Dani P. APPLICANT: Matthews, Thomas J. APPLICANT: Wild, Carl T.
                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: New York
                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 30
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                                                                                  Local
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                                                                  l Similarity
35; Conserv
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1155 Avenue of the Americas
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Conservative C
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Pred. No. 7.3e-17;
                                                                               Score 188; DB 1;
Pred. No. 7.5e-17;
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RESULT 11
US-09-071-877-1
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US-08-486-099-1
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                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                               Matches
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APPLICANT: Kang, Myung-Chol
APPLICANT: Bray, Brian
APPLICANT: Lichty, Maynard
APPLICANT: Mader, Catherine
APPLICANT: Merutka, Gene
TITTLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEPTIDE SYNTHESIS
FILE REFERENCE: 7872-050
CURRENT APPLICATION NUMBER: US/09/071,877
CURRENT FILING DATE: 1998-05-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOTTWARE: Patentin Release #1.0, Ve

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/486,099

FILING DATE: 07-10N-1995
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
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ATTORNEY/AGENT INFORMATION:
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Langlois, Alphonse J.
ENTION: COMPOSITIONS FOR INHIBITION OF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (212) 790-9090
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of the Americas
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NUMBER OF SEQ ID NOS: 19

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US-08-360-107A-1
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                                                                                                                  US-08-360-107A-1
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Best Local S
Matches 35
                                                                       Query Match
Best Local
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9990
                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                            TOPOLOGY: un
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                                                                                                                                                         STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
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                                                        l Similarity
35; Conserv
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                                                                                                                                                                       amino acid
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Langlois, Alphonse J.
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Lambert, Dennis M.
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                                                        Conservative
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                                                                                                                              peptide
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                                                                                                                                                                                                                                            869-9741/8864
                                                                    100.0%;
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                                                     Score 188; DB 3;
Pred. No. 7.5e-17;
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RESULT 14
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US-08-484-223B-1
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                                                                                                                               GENERAL INFORMATION:
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                                                                                               APPLICANT: APPLICANT:
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LENGTH: 36 amino acids
TYPE: amino acid
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TELECOMMUNICATION INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: peptide
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MEDIUM TYPE: Floppy disk
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STATE: New Yor
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10036-2711
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(212) 869-9741/8864
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                  Langlois,
                               Petteway, Stephen R.
                                                Barney, Shawn O.
Lambert, Dennis M.
                                                                                Wild, Carl T.
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55 Avenue of the Americas
COMPOSITIONS FOR INHIBITION
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                  Alphonse
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US-08-919-597-1
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TOPOLOGY: unl
MOLECULE TYPE:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DDS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: COTUZZI, Laura A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                          ent No.
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MEDIUM TYPE: Floppy disk
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ATTORNEY/AGENT INFORMATION:
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                                                                                  COUNTRY: USA
ZIP: 10036-2711
                                                                                                                CITY: New York
STATE: New Yor
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ZIP: 10036-2711
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1155 Avenue of the Americas
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1155 Avenue
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Lambert, Dennis M.
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                                                                                                                                                                                                TRANSMISSION 273
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of the Americas
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; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
US-08-919-597-1
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Best Local Similarity
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APPLICATION NUMBER: US/08/919,597
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TELECOMMUNICATION INFORMATION:
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             1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                            NAME:
2 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                    35;
                                                                                                                                                                 : 36 amino acids amino acid
                                                                                                                                                                                                                                                                                                         Coruzzi, Laura A.
                                                                                                                                                                                                                                    (212) 790-9090
(212) 869-9741/8864
                                                     Conservative
                                                                                                                                                                                                                         PENNIE
                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                     US 08/470,896
                                                                                                                                                                                                                                                                                          30,742
                                                                                                                                                                                                            <u>_</u>
                                                     0,;
                                                                                                                                                                                                                                                                                7872-020
                                                                   Score 188; DB 3; Pred. No. 7.5e-17
                                                       Mismatches
                                                        0
                                                                                Length 36;
                                                       Indels
                                                       0;
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Search completed: May 16, 2003, 11:22:11 Job time: 9.90964 secs

Gaps

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                l number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-623-533A-117
188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   May 16, 2003, 11:20:00 ; Search time 15:3213 Seconds (without alignments) 220.333 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362588 seqs, 96450795 residues
                                                                                                                                                                                                                                                                                                                                                                                                  Published_Applications_AA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                        /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
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/cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
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/cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
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                                                                                                                                                                                                                               _PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

19	18	17	16	15	14	13	12	11	10	9	80	7	6	5	4	ω	N		Result No.
188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	Score.
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query Match
268	268	268	256	254	232	221	177	56	46	37	36	36	36	36	36	36	36	36	Query Match Length DB
10	10	10	9	9	9	9	9	10	10	9	10	10	10	10	10	9	9	9	DB.
US-09-854-816-18	US-09-854-816-17	US-09-854-816-16	US-10-059-271-97	US-10-059-271-82	US-10-059-271-81	US-10-059-271-84	US-10-040-349B-2	US-09-779-451-4	US-09-779-451-41	US-09-848-616-176	US-09-854-816-108	US-09-854-816-1	US-09-834-628-1	US-09-779-451-5	us-09-796-202-10	US-09-493-346-1	US-10-116-797-1	US-09-874-475-16	ID
18,	Sequence 17, Appl	e 16,	Sequence 97, Appl	Sequence 82, Appl	Sequence 81, Appl		Sequence 2, Appli		Sequence 41, Appl	Sequence 176, App	Sequence 108, App	Sequence 1, Appli	1,	,	Sequence 10, Appl	Sequence 1, Appli	Sequence 1, Appli	Sequence 16, Appl	Description

45	44	43	42	41	40	39	38	37	36	35	34	3 3	32	31	30	29	28	27	26	25	24	23	22	21	20
175	175	175	176	176	176	176	177	178	179	179	179	180	182	185	185	188	188	188	188	188	188	188	188	188	100
93.1					93.6			94.7			•		•	98.4	98.4	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
268	267	46	847	646	619	268	269	269	269	268	233	268	1231	268	36	1186	1101	861	856	853	519	391	345	345	1,40
10	10	10	10	10	10	10	10	10	10	10	10	10	9	10	10	9	9	9	10	9	10	9	10	9	¥
US-09-854-816-41	US-09-854-816-38	US-09-854-816-109	US-09-476-242-2	-609-	US-09-891-609-4	US-09-854-816-26	-816		US-09-854-816-12	US-09-854-816-9	US-09-854-816-50	US-09-854-816-13	US-10-059-271-94	US-09-854-816-19	US-09-912-824-1	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	T-9640-040-T
41,	Sequence 38, Appl	Sequence 109, App	٧,	Sequence 2, Appli	Sequence 4, Appli	26,	Sequence 28, Appl	46,	12	9	Sequence 50, Appl		,	19,				Sequence 103, App	1,	`	Sequence 8, Appli	Sequence 93, Appl	Sequence 8, Appli	Sequence 49, Appl	sequence I, Appil

ALIGNMENTS

RESULT 1

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US-09-874-475-16
; Sequence 16, Application US/09874475
; Publication No. US20020182592A1
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                                                                                                                                                                                                                             US-10-116-797-1
                                                                                                                                                                                                                                                     RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORGANISM: Fusion Inhibitor Peptide US-09-874-475-16
                                                                                                                                            Sequence 1, Application US/10116797 Publication No. US20030044411A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS FILE REFERENCE: 2793/65166 CURRENT APPLICATION NUMBER: US/09/874,475 CURRENT FILING DATE: 2001-06-04 NUMBER OF SEQ ID NOS: 16 SOFTWARE: Patentin version 3.1 SEQ ID NO 16 LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 188; DB 9; Best Local Similarity 100.0%; Pred. No. 6.2e-16; Matches 35; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                 APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING
FILE REFERENCE: 64672-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Petropoulos, Christos J. APPLICANT: Parkin, Neil T. APPLICANT: Whitcomb, Jeanette APPLICANT: Huang, Wei
CURRENT APPLICATION NUMBER: US/10/116,797 CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                              2 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                             1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                              36
                                                                           HIV-1 INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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; NAME/KEY: PEPTIDE; LOCATION: (1)..(36); OTHER INFORMATION: US-09-796-202-10
                                                                                                                                   NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version
SEQ ID NO 10
LENGTH: 36
TYPE: PRT
ORGANISM: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens US-10-116-797-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-493-346-1
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Best Local Similarity 100.
35; Conservative
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LENGTH: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 35; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 1
Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                   Sequence 10, Application US/09796202
Patent No. US20020068813A1
                                                                                                                                                                                                                                              APPLICANT: Dragic, Tatjana APPLICANT: Olson, William APPLICANT: Olson, William TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION FILE REFERENCE: 2048/61010/JPW/SHS CURRENT APPLICATION NUMBER: US/09/796,202 CURRENT FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1 TITLE OF INVENTION: Infection FILE REFERENCE: 61009 CURRENT APPLICATION NUMBER: US/09/493,346 CURRENT FILING DATE: 2000-01-28 NUMBER OF SEQ ID NOS: 5 SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Olson, William C APPLICANT: Maddon, Paul J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 equence 1, application US/09493346 blication No. US20030082185A1 ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                          FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Similarity
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Pred. No. 6.2e-16;
; Mismatches 0;
 Score 188; DB 10;
Pred. No. 6.2e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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              Length 36;
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; FEATURE: OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: peptide; OTHER INFORMATION: DP178
US-09-834-628-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Human immunodeficiency virus type 1 US-09-779-451-5
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US-09-779-451-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-834-628-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
SOFTWARE: PatentIn version 3.0
SEQ ID NO 5
LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
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Best Local Similarity
Matches 35; Conserv
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                                                                          Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/09834628 Patent No. US20020119922A1
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: YU, YEON GYU
APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PEPFIDES FOR INHIBITION OF HIV INFECTION
FILE REFERENCE: 05823.0198-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection o:
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2001-08-17 PRIOR APPLICATION NUMBER: US 60/235,901 PRIOR FILING DATE: 2000-09-28
                                                                                                                                                                                                                                                                 LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
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                                     TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                    36
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                                                                        100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 188; DB 10; 100.0%; Pred. No. 6.2e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for Detection of Viral Fusion Inhibitors
                                                                            0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                      Mismatches
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                                                                                                                 Length
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US-09-854-816-1
                                                                                                                                                                             Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                   Sequence 108, Application US/09854816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9-854-816-1
                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
mes 35; Conserv
                                                                                                                                                                                                                                                                                                                     2 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                          1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                          APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: Linear MOLECULE TYPE: DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
                                         TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Constrained Helical Peptides and Methods of
NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: South San Francisco
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                                                                             J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                  J. Kevin Judice
Robert S. McDowell
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Melissa A. Starovasnik
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Andrew C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 188; DB 10; 100.0%; Pred. No. 6.2e-16;
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                  Making Same
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                                                                                                 US-09-848-616-176
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                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 176
LENGTH: 37
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                                Matches
                                                              Query Match
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Best Local Similarity
                               Best Local Similarity Matches 35; Conserv
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Publication No.
                                                                                                                                                                                                                          APPLICANT: Lechner, Franziska
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
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                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Sebbel, Peter
                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                 TYPE: PRT
                                                                                                               OTHER INFORMATION: DP178c peptide
                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 108:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 650/952-9881
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APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: Linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
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STREET: 1 DNA Way
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                                                                                                                                                                                                                                                                                                                                                              Dunant, Nicolas
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                                Conservative
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                                                100.0%;
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                             Score 188; D
Pred. No. 6.4
0; Mismatches
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Pred. No. 6.2e-16;
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                                             6.4e-16;
                                                              DB 9;
                                                            Length 37;
                        Indels
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RESULT 12
US-10-040-349B-2
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; TYPE: PRT
; ORGANISM: Human immunodeficiency virus type 1
US-09-779-451-4
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US-09-779-451-41
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                      Sequence 2, Application US/10040349B Publication No. US20030082521A1 GENERAL INFORMATION:
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Best Local Similarity 100.0%;
Matches 35; Conservative (
                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn version 3.0 SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR ETILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR ETILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wild, Carl T.
APPLICANT: Wild, Carl T.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING.DATE: 2001-08-17
DETER APPLICATION.
    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn
2Q ID NO 41
LENGTH: 46
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                                                                                                                                                                        17 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 51
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                                                                                                                                                                                                                                                            100.0%; Score 188; DB 10; llarity 100.0%; Pred. No. 9.9e-16; Conservative 0; Mismatches 0;
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Pred. No. 8e-16;
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US-10-059-271-84
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                                                                                 Sequence 81, Application US/10059271 Publication No. US20030082208A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 84
LENGTH: 221
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SEQ ID NO 2
LENGTH: 177
TYPE: PRT
ORGANISM: Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches · 35; Conserv
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Best Local Similarity
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                                     APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: DE 101
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: ALBRE-22
CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEF/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES TITLE OF INVENTION: BEING IMMOBILIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Peptide
LOCATION: (1)..(177)
OTHER INFORMATION: polypeptide derived from gp41 LAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                        132 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 166
                                                                                                                                                                                                                                                                                1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
NICOLAUS, STEFAN
VENTION: PROTEIN I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Charloteaux, Benoit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Krell, Tino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     El Habib,
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  HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
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FILE REFERENCE: ALBRE-22
CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 82
LENGTH: 254
TYPE: PRT
TYPE: PRT
Search completed: May 16, 2003, 12:10:23 Job time : 15.3213 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 81
LENGTH: 232
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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US-10-059-271-82
Sequence 82, Application US/10059271
Sequence No. US20030082208A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic ; OTHER INFORMATION: peptide US-10-059-271-81
                                                                                                                                      Query Match
Best Local Similarity
Matches 35; Conserv
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Best Local Similarity 100.0%;
Yatches 35; Conservative
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OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide
.10-059-271-82
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APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
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PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEO ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: BEING IMMOBILIZED FILE REFERENCE: ALBRE-22 CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                         1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                    Conservative
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Pred. No. 4.8e-15;
Mismatches 0;
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Pred. No. 4.4e-15;
Mismatches 0;
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protein -

protein search, using sw model

Copyright

GenCore version 5.1.4_p5_4578 (c) 1993 - 2003 Compugen Ltd.

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Result
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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Gapop 10.0 , Gapext 0.5
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    AAR64396
AAB52686
AAB152689
AAX89389
ABB00797
ABB02273
AAB502273
AAB577790
AAB54933
AAR64397
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Viral core polypep
Dp178-like/Dp107-l
Core polypeptide T
Anti-HIV peptide D
DP-178 homologue 6
                                                                                                         DP-178 homologue 6
T20//DP178 peptide
HIV-1 isolate LAI
Core polypeptide f
Viral DP178/107-1i
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77	973	969	942	924	920	920	913	913	372	372	366	153	281	892	265	197	195	280	291	701	339	136	193	778	162	334	318	BB0227	вв0211	B0079	B0063	8E68A	Œ	83
ore pol	ore polypeptide	e polypeptide	V-1 isolat	0/DP178 pe	P17	0/DP178 peptide	-1 LAI gp4	hetic pep	ID NO. 1 from	ID NO. 108 fr	-1 derive	78 corresponds	erived f	i-HIV peptide	e polypeptide	e polypeptide	178-like/DP107-	P178-like/DP107-	iral core polype	iral core polype	iral DP178/107-1	iral DP178/107	ore polypeptide	-1 isolate	0/DP178 peptid									

ALIGNMENTS

PR XX	XX	xx	PD XX	PN	××	es e	Į F	FT	FT	FT	FT	FH	XX	SO	XX	KW	KW	KW	xx	DE	XX	DT	××	AC	××	AAR6 ID
07-JUN-1993;	07-JUN-1994;		22-DEC-1994.	WO9428920-A.			Modified-site				Modified-site	Кеу		Synthetic.	•	alpha helix; le	human immunode:	antiviral activ		DP-178 homologue 65 derived		25-AUG-1995 (AAR64396;		AAR64396 ID AAR64396 standa
9305-0073028.	94WO-US05739.	•			÷	<pre>/note= "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier qp, attached"</pre>				<pre>/note= "optionally has an amino, acetyl,</pre>		Location/Qualifiers				alpha helix; leucine zipper; DP-185.	human immunodeficiency virus; transmembrane protein; gp41;	antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI;	7	ue 65 derived from HIV-1 has antiviral activity.		(first entry)				396 AAR64396 standard; Peptide; 34 AA.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          truncated at the amino terminus. DP-178 corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein protein interactions, and possess anti-viral activity. The peptide derivs, were identified by a computer assisted peptide sequence search. The peptides inhibit transmission to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AIH
The present sequence is a peptide helical segment of the ectodomain
                                      Claim 12;
                                                              Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                    WPI;
                                                                                                                                                                                               05-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB52686
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB52686 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      specific diagnostic tools
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Computer search generated synthetic
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Petteway SR,
                                                                                                                                                                                                                        05-MAY-2000;
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                                                                                                                                                                                                                                                                           WO200066622-A1
                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus
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                                                                                                                                                                                                                                                                                                                                                                                T20/DP178
                                                                                                                                                                                                                                                                                                                                                                                                          23-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   uninfected cells, and can also be used as type and/or subtype
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYDU-) UNIV DUKE
                                                                                                                                                                    (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                      Page
                                                                                                                                                                                                                                                                                                                                                                                peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bolognesi
, Wild CT
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                                                                                                                                                                                                                        2000WO-US12371
                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                      25; 148pp; English.
                                                                                                                                                                                              99US-0132686
                                                                                                                                                                                                                                                                                                                                                                                fragment #64
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide;
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                                                                                                                                                                                                                                                                                                                                          P178; gp41 ectodomain; HIV-1 fusion;
family; FPR; inflammatory response
                                                                                                                                             uS
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4
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                                                                                                                                                                                                                                                                                                    type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 183; DB 16;
Pred. No. 1.1e-15;
Mismatches 0;
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                                                                                                                                          Gong W,
fragment of T20/DP178. T20/DP178 of HIV-1 protein gp41. T20/DP178
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                                                                                                                                           Murphy PM
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                                                                                                                                                                                                                                                                                                                                          up-regulation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/Dp178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
a neutralising antibody response to a broad spectrum of HIV (human immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or mimic the coiled coil solution structure of the N-helical domain (the heptad repeat region), or can correspond to the coiled coil solution structure of the C-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), or the gp41 core 6-helix bundle, which is formed by the interaction of the N- and C-helical domains of three gp41 proteins. The peptides
                                                                                                                                                                      Sequences AAB14604-B14606 and AAB14607-B14670 represent peptides from the C-helical domain of the gp41 envelope glycoprotein from HIV-1 group M, subtype B, isolate LAI. The invention relates to r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gp41 transmembrane-proximal amphipathic alpha-helical segment; core 6-helix bundle; viral entry inhibition; immunogenic; antibbody, humoral response; broad spectrum vaccine; anti-HIV; envelope glycoprotein; prophylaxis; therapy; group M; subtype
                                                                                                                                                                                                                                              Disclosure; Page 33;
                                                                                                                                                                                                                                                                                coiled-coil
                                                                                                                                                                                                                                                                                    Raising neutralizing antibody response to human comprises administering a polypeptide capable of coiled-coil solution structure
                                                                                                                                                                                                                                                                                                                                                     WPI;
                                                                                                                                                                                                                                                                                                                                                                                     Wild CT,
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07-JAN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HIV-1 isolate LAI gp41 C-helical domain peptide P-18, fragment #63
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34; Conser
                                                                                                                                                                                                                                                                                                                                                                                     Weiss CD;
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2000US-0480336
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                                                                                                                                                                                                                                                                                structure
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Pred. No. 1.1e-15;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                  of
                                                                                                                                                                                                                                                                                                                  immunodeficiency virus,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be multimerised. For example, N- and C-helical domain peptides can be alternately linked together to form a peptide which minics the core 6-helix bundle. Administration of the peptide(s) generates a humoral response, with the production of antibodies against 941 structures involved in viral entry. As these portions of 9941 are well conserved, such antibodies may be effective against a broad range of HIV strains and isolates. The peptide compositions may be administered as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect unifected cells. A composition
                   sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (941) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance to pharmacokinetic properties such as increasing the half-life of any coopolypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides
          prevention of selected from
                                                                                                                                                                                             Disclosure; Page 35; 124pp; English
                                                                                                                                                                                                                                                                                                                    Barney S,
                                                                                                                                                                                                                                                                                                                                                      (TRIM-) TRIMERIS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            colony stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; vanti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Core polypeptide fragment T No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV cell entry.
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enhancer sequence -
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                                                                                                                                         relates to hybrid polypeptides comprising enhancer peptide ed to core polypeptides. The enhancer polypeptides are
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a disease. inc
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Pred. No. 1.1e-15;
        cytokine,
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                                     and/or with peptides derived from them. This interaction is required normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in this till infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                               The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-LIAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus; HIV; respiratory syncytial virus; RSV; virucide; heptad repeat region; transmembrane protein; gp41; HR1; HR2;
                             cne
                                                                                                                                                                                                        Disclosure; Page 49; 587pp; English
                                                                                                                                                                                                                                                    Heptad repeat region peptide analogs useful for fusion, useful for treating HIV and Respiratory
                                                                                                                                                                                                                                                                                                                                 Antczak JB,
                                                                                                                                                                                                                                                                                                                                                              (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                          29-FEB-2000;
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                          specification
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Syncytial Virus
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Matches 34
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                                                                                                                                                                                                                                                     The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-ILAI transmembrane protein 941. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required for normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Viridiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus; HIV; respiratory syncytial virus; RSV; virucide; heptad repeat region; transmembrane protein; gp41; HR1; HR2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Viral core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABB02273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABB02273 standard; Peptide;
AAU13343;
                          AAU13343 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antczak JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-FEB-2001; 2001WO-US03988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200164013-A2
                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-FEB-2000; 2000US-0515965
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Heptad repeat region peptide analogs useful for inhibiting virus/cells fusion, useful for treating HIV and Respiratory Syncytial Virus
                                                                                                                                                                                                                                          the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                            infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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                                                                                               SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                           SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptide,
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                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Delmedico MK,
                            Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                               587pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ
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                            34 AA
                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Erickson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 183; DB 22;
Pred. No. 1.1e-15;
                                                                                                                                                                      Score 183;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                         Mismatches
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                                                                                                  34
                                                                                                                                                                      DB 22;
.1e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lambert DM,
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                                                                                                                                                          Indels
                                                                                                                                                                                   Length
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AAB77790
ID AAB7
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AC AAB7
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DT 19-1
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                                                                                                                                              RESULT 8
                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                corresponds to amino acids 558-595 of gp41 from HTV-ILAI. The invention also relates to a method of identifying compounds that inhibit the formation of or disrupts a DP107/DP178 complex. The method comprises detecting the formation of a DP107/DP178 complex. The method comprises or absence of a test compound, in a reaction mixture containing DP107 and DP178 peptides. The method is useful for identifying compounds, including small molecule compounds, which may themselves exhibit antifusogenic, antiviral or intracellular modulatory activity. The DP178-like/DP107-like peptides are useful to inhibit human and non-human retroviral, particularly HTV, transmission to uninfected cells. The present sequence represents one of the DP178-like/DP107-like peptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to peptides which exhibit anti-retroviral activity. The peptides of the invention (AAU12559-AAU14009) comprise DP178-like and DP107-like peptides. The DP178 peptide corresponds to amino acids 639-673 of the transmembrane protein gp41 from human immunodeficiency virus 1 (HIV-1) isolate LAI. The DP107 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying a compound that inhibits the formation of or disrupts a DP107/DP178 complex, especially compounds with antifusogenic, antiviral or intracellular modulatory activity, by detecting the formation of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 68; 259pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-442157/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jeffs P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-2000; 2000WO-US35727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human immunodeficiency virus 1 isolate LAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antifusogenic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anti-retroviral; DP178-like; DP107-like; transmembrane protein gp41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DP178-like/DP107-like peptide T-924.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-NOV-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified-site
                                                             AAB77790;
                                                                                                      AAB77790 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                             1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                          SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                           34;
                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                         34 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complex
                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiviral; HIV transmission; mutant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "C-terminal amide"
                                                                                                      Peptide;
                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Erickson
                                                                                                                                                                                                                                                                                           0;
                                                                                                        34
                                                                                                                                                                                                                                                                                      Score 183; Db 22,
Pred. No. 1.1e-15;
Pred. No. 1.1e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lawless
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Merutka
                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                     34;
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                                                                                                                                                                                                                                                                                           0;
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19-APR-2001

(first entry)

0;

Core polypeptide

T924.

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AAB54933
ID AAB5
XX
AC AAB5
XX
AC AAB5
XX
DT 05-N
XX
DE Anti
XX
Long
KW Long
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                                                                                                                                                                                                                                                                       QY
                                                                                                                                                                                        RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is a core polypeptide which may be linked to CC an enhancer peptide to form a novel hybrid polypeptide. The hybrid CC polypeptide exhibits enhanced pharmacokinetic properties relative to those exhibited by the core polypeptide when introduced into a living consistence in the invitro or ex vivo half-life of the core polypeptide. The hybrid and core polypeptides can be used for modulating fusogenic events and intracellular processes involving colled-coll peptide interactions. Other uses include preventing, ctreating and/or diagnosing disorders involving fusion events (e.g. condulation of neurotransmitter exchange and sperm-egg fusion), ctreating and/or diagnosing disorders involving fusion events (e.g. cintracellular processes involving colled-coll peptides (e.g. bacterial collinations) and viral infections that involve cell-cell and/or cimmunodeficiency virus, respiratory syncytial virus, Epstein-Barr collinations, hepatitis B virus, Mason-Pfizer virus and polio virus). The enhancer peptide sequence increases the half-life and reduces the clearance rate of therapeutic peptides, which increases their effects.

The enhancer peptide sequence increases the half-life and reduces the clearance rate of therapeutic peptides, which increases their effects.
                                                                                                                                                                                                                                                                                                            Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                            Query Match
Long lasting fusion peptide antifusogenic; mobile blood
                                                  Anti-HIV peptide DP178 amino truncation peptide #31.
                                                                                    05-MAR-2001
                                                                                                                       AAB54933;
                                                                                                                                                        AAB54933 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 48; 151pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New hybrid polypeptide, e.g. viral infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-147136/15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JAN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coiled-coil peptide interaction; fusi bacterial infection; viral infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Core polypeptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TRIM-) TRIMERIS INC
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                                                                                                                                                                                                                                                                                                                            Local
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                                                                                                                                                                                                                                                                          1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                               they
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide; enhancer; antiviral; anti-HIV;
hepatotropic; antiinflammatory; hybrid
il peptide interaction; fusion-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Guthrie KI,
                                                                                                                                                                                                                                                                                                          100.0%;
llarity 100.0%;
Conservative 0
                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                are used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          useful for preventing, treating and comprises an enhancer peptide linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Merutka G,
inhibitor;
component;
                                                                                                                                                        34
                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                          Score 183; DB 22;
Pred. No. 1.1e-15;
; Mismatches 0;
                                                                                                                                                        Ã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anwer MK, Lambert DM;
viral infection;
measles virus; Mo
                                                                                                                                                                                                                                          34
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disorder;
                                                                                                                                                                                                                                                                                                                                           Length 34;
                                                                                                                                                                                                                                                                                                            Indels
 n; antiviral; MeV; SIV;
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to a core
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RESULT 10
AAR64397
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                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  minimises the need for more frequent, or even continual, of the peptides. AAB54784 to AAB55431 represent peptides exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A modified peptide and a reactive group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds useful for treatment of viral infections, e.g.
               alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          simian immunodeficiency virus; human parainfluenza virus; HPIV; RSV; human respiratory syncytial virus; human immunodeficiency virus; HIV
                                human
                                               antiviral activity; DP-178; DP-107; diagnostic;
                                                                                   DP-178 homologue 66 derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a modified anti-viral peptide (I) comprising a peptide that exhibits anti-viral activity and a reactive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-007496/01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-MAY-1999;
10-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAY-2000;
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                                                                                                                                                                                                                                                                                                       SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                                                                                                                                      SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
               helix;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunodeficiency virus
           immunodeficiency virus; transmembrane protein;
helix; leucine zipper; DP-185.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunodeficiency virus type 1.
                                                                                                                                                                                             standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                    34
                                                                                                                                                                                                                                                                                                                                                          100.0%; ilarity 100.0%; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US13651
                                                                                                                       (first entry)
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99US-0153406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   211pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Boudjellab N,
                                                                                                                                                                                               ω
G
                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                   from HIV-1 has antiviral activity.
                                                                                                                                                                                                                                                                                                                                                          Score 183; DB 22;
Pred. No. 1.1e-15;
D; Mismatches 0;
                                                                                                                                                                                               A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robitaille M,
                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Milner PG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    administration
                                                                                                                                                                                                                                                                                                                                                                                                34;
                                                                                                                                                                                                                                                                                                                                                            0,
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RESULT 11
AAB52687
Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                  AAR64365-97 are peptide derivs. of DP-178 (AAR64364) which have been truncated at the amino terminus. DP-178 corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein protein interactions, and possess anti-viral activity. The peptide derivs. were identified by a computer assisted peptide sequence search. The peptides inhibit transmission to uninfected cells, and can also be used as type and/or subtype
09-NOV-2000
                        WO200066622-A1
                                                Human immunodeficiency
                                                                                  Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response
                                                                                                                         T20/DP178 peptide
                                                                                                                                                   23-FEB-2001
                                                                                                                                                                           AAB52687;
                                                                                                                                                                                                   AAB52687 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Computer search generated synthetic peptides - are inhibitors \ensuremath{\mathsf{HIV}} transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barney SO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYDU-) UNIV DUKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9428920-A.
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                                                                                                                                                                                                                                                                SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                               1 Similarity 34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                       diagnostic tools
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 133; 182pp; English
                                                                                                                                                                                                                                                                                                                                                                  35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bolognesi DP,
Wild CT;
                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93US-0073028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94WO-US05739
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note-
                                                                                                                         fragment #65.
                                                                                                                                                                                                                                                                                                                           100.0%;
                                                virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "optionally has a carboxyl, am or macromolecular carrier gp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9-fluorenylmethoxy-carbonyl, hydrophobic macromolecular carrier gp. attached"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "optionally has an amino, acetyl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lambert DM,
                                                                                                                                                                                                    35
                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                             Score 183; DB 16;
Pred. No. 1.2e-15;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matthews TJ;
                                                                                                                                                                                                                                                                                                                                       Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mido, hydrophobic
attached"
                                                                                                                                                                                                                                                                                                                                         35;
                                                                                     up-regulation;
                                                                                                                                                                                                                                                                                                                0;
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RESULT 12
AAB14670
ID AAB14
XX
ZXEXE
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Best Local S
Matches 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is a peptide fragment of T20/DP178. T20/DP178 i helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 i located in the carboxyl terminus of the gp41 ectodomain. gp41 plays critical role in the fusion of HIV-1 and host cell membranes. T20/DP
                                                                                                                                                                                                                                                             gp41 transmembrane-proximal amphipathic alpha-helical segment;
core 6-helix bundle; viral entry inhibition; immunogenic;
antibody; humoral response; broad spectrum vaccine; anti-HIV;
                                                                                                                                                                                                                                                                                                    HIV-1; gp41 C-helical domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antagonist is used to modulate inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-MAY-2000;
          WPI; 2000-465959/40
                                  Wild CT, . Weiss CD;
                                                                                              08-JAN-1999;
07-JAN-2000;
                                                                                                                                     10-JAN-2000; 2000WO-US00456
                                                                                                                                                                                      WO200040616-A1
                                                                                                                                                                                                             Human immunodeficiency virus type
                                                                                                                                                                                                                                                  envelope glycoprotein;
                                                                                                                                                                                                                                                           antibody;
                                                                                                                                                                                                                                                                                                                          HIV-1 isolate LAI gp41 C-helical domain peptide P-18, fragment #64.
                                                                                                                                                                                                                                                                                                                                                    24 - NOV - 2000
                                                                                                                                                                                                                                                                                                                                                                                                    AAB14670 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (USSH · ) US DEPT HEALTH & HUMAN
                                                                                                                                                              13-JUL-2000
                                                           (WILD/) WILD C T.
(WEIS/) WEISS C D
                                                                                                                                                                                                                                      isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity nes 34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 25; 148pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oppenheim JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ω
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; ilarity 100.0%; Conservative
                                                                                                 99US-0115404
2000US-0480336
                                                                                                                                                                                                                                                                                                                                                   (first entry)
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                                                            0
                                                                                                                                                                                                                                          prophylaxis; therapy; group M; subtype B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Su S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                        3
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 183; I
Pred. No. 1.2
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                      AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 21;
.2e-15;
s 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            alternately linked together to form a peptide which mimics the core of shelix bundle. Administration of the peptide(s) generates a humoral response, with the production of antibodies against gp41 structures involved in viral entry. As these portions of gp41 are well conserved, such antibodies may be effective against a broad range of HIV strains and isolates. The peptide compositions may be administered as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect uninfected cells. A composition reduce HIV infection of uninfected cells. Antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV cell entry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          process of viral entry into host cells. Such peptides can correspond to or mimic the coiled coil solution structure of the N-helical domain (the heptad repeat region), or can correspond or mimic the C-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), or the gp41 core 6-helix bundle, which is formed by the interaction of the N- and C-helical domains of three gp41 proteins. The peptides can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be multimerised. For example, N- and C-helical domain peptides can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIV-1 group M, subtype B, isolate LAI. The invention relates to ra a neutralising antibody response to a broad spectrum of HIV (human immunodeficiency virus) strains and isolates, comprising the
                                                           20-MAY-1998;
                                                                                                                                                   25-NOV-1999
                                                                                                                                                                                               W09959615-A1
                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                                                                                               colony stimulating factor; hormone; angiogenic factor
                                                                                                                                                                                                                                                                                                    Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                              Core polypeptide fragment T No.
                                                                                                                                                                                                                                                                                                                                                                                                                                            23-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY89388 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequences AAB14604-B14606 and AAB14607-B14670 represent peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 34; 97pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Raising neutralizing antibody response to human immunodeficiency virus, comprises administering a polypeptide capable of forming a stable coiled-coil solution structure -
                  (TRIM-) TRIMERIS INC
                                                                                                       20-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the C-helical domain of the gp41 envelope glycoprotein from 1 group M, subtype B, isolate LAI. The invention relates to raising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                                                              98US-0082279
                                                                                                       99WO-US11219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 183; DB 21;
Pred. No. 1.2e-15;
                                                                                                                                                                                                                                                                                                                                                                                              923.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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35;
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Best Local S
Matches 34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core
WPI; 2001-514829/56
                                                                                                                                           07-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus; HIV; respiratory syncytial virus; RSV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Viral DP178/107-like region peptide T715.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (9p41) protein sequences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 35; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A new hybrid polypeptide with enhanced comprises enhancer sequence -
                                   Antczak JB, Delmedico
                                                                                                         29-FEB-2000;
                                                                                                                                                                               07-SEP-2001
                                                                                                                                                                                                                  WO200164013-A2
                                                                                                                                                                                                                                                                     Modified-site
                                                                                                                                                                                                                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                                                                              Viridiae
                                                                                                                                                                                                                                                                                                                                                                                                  infection
                                                                                                                                                                                                                                                                                                                                                                                                                    virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABB00634 standard; Peptide; 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and torm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptide that they are linked to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Barney S,
                                                                   (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100 nes 34; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hybrid polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                               heptad repeat region; transmembrane protein; gp41; HR1; HR2
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                                                                                                       2000US-0515965
                                                                                                                                           2001WO-US03988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             relates to hybrid
                                                                                                                                                                                                                                                                   /note= "N-terminal is substituted by 35
                                                                                                                                                                                                                                                      /note=
                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                 MK,
                                                                                                                                                                                                                                                      "C-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Merutka G,
                                Erickson JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 183; DB 21;
Pred. No. 1.2e-15;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polypeptides comprising enhancer peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The core polypeptides are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pharmacokinetic properties
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                                 Lambert DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lambert DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                 Sista
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to isolated analogues of the heptad repeat region. peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR1) respectively, of HIV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required for normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytlal virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in
The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region
                                                             Disclosure; Page 49; 587pp;
                                                                                                          Heptad repeat region peptide analogs useful for fusion, useful for treating HIV and Respiratory
                                                                                                                                                         WPI; 2001-514829/56
                                                                                                                                                                                       Antczak JB,
                                                                                                                                                                                                                     (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                  29-FEB-2000;
                                                                                                                                                                                                                                                                                07-FEB-2001; 2001WO-US03988
                                                                                                                                                                                                                                                                                                                 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                         Key
Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                          Viridiae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus; HIV; respiratory syncytial virus; RSV; virucide; heptad repeat region; transmembrane protein; gp41; HR1; HR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viral DP178/107-like region peptide T923.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB00796;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABB00796 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Heptad repeat region peptide analogs useful for inhibiting virus/cells fusion, useful for treating HIV and Respiratory Syncytial Virus infection -
                                                                                             intection
                                                                                                                                                                                                                                                                                                                                              WO200164013-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            infection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               h 100.0%; Score 183; DB 22; Similarity 100.0%; Pred. No. 1.2e-15; 34; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  heptad repeat region; transmembrane protein; gp41; HR1; HR2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35
                                                                                                                                                                                      Delmedico
                                                                                                                                                                                                                                                  2000US-0515965
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                                                             English
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                                                                                                                                                                                       JB,
                                                                                                                                                                                       Lambert
                                                                                                          inhibiting virus/cells
Syncytial Virus
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                                                                        Query Match
Best Local S
Matches 34
                                                                                                                                                                                             HR1) respectively, of HIV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in
                                                                                                                                                Sequence
                                                                                                                                                                                  the specification
                                                                  / Match 100.0%;
Local Similarity 100.0%;
nes 34; Conservative (
                  1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
2 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                35
                                                                                                                                                AA;
                                                                         0;
                                                                      Score 183; DB 22;
Pred. No. 1.2e-15;
); Mismatches 0;
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for

Search completed: May 16, Job time: 30.6546 secs 2003, 11:12:03

0,

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2003, 11:04:54; Search time 11.4699 Seconds (without alignments) 284.970 Million cell updates/sec

Title:
Perfect score:
Sequence:

US-09-623-533A-118 183 1 SLIHSLIEESQNQOEKNEQELLELDKWASLWNWF 34

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

al number of hits satisfying chosen parameters:

283224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000 .

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7 .	0	5	4	ω	2	1		No.	Result
156	158	158	160	161	162	162	162	164	164	165	165	165	165	165	166	167	167	170	171	171	174	174	174	174	183	183	183	183		Score	
85.2				88.0			88.5				90.2	•		•	•		91.3	•		93.4	95.1	95.1	95.1	95.1	٠	100.0	100.0	100.0	,	-	Ouerv
729	852	357	846	357	855	853	843	855	357	859	852	358	358	. 358	445	847	847	357	358	357	861	856	856	443	861	856	854	851	1	Length	
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VCLJKX	VCLJBR	S21992	VCLJND	S22006	VCLJZR	S54384	H44001	VCLJA2	S22004	VCLJMN	T12016	S70417	S22000	S22002	A41621	S13289	T09448	S21996	S21998	S21994	VCLJSC	VCLJ3W	VCLJVL	C41621	VCLJLV	VCLJH3	S13288	S33985		ID	
	protein -	3	О.	=	env polyprotein pr	envelope polyprote	polyprotein	~	envelope protein g	env polyprotein pr	envelope glycoprot	envelope protein g	protein	3	env polyprotein M	env protein - huma	glycopro	envelope protein g	protein	protein		polyprotein	env polyprotein pr	polyprotein		polyprotei	env protein - huma	env polyprotein -		Description	

RESULT 3 VCLJH3

44	43	42	41	40	39	38	37	36	<u>ω</u>	34	ω u	32	31	30
8 8 5 5	. 86	86	86	118	135	135	137	141	148	148	152	154	155	156
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S30448 S30452	VCLJG5	S03068	VCLJG3	A53034	S49197	S21990	A44963	VCLJSI	JT0954	JU0266	VCLJH4	B41621	T01672	VCLJKB
env protein - huma env protein - huma	env polyprotein -	env protein - huma	env polyprotein -	gag polyprotein -	envelope protein p	envelope protein g	env polyprotein pr	env polyprotein pr	envelope polyprote	envelope polyprote	env polyprotein -	env polyprotein D	envelope polyprote	env polyprotein pr

ALIGNMENTS

OY 1 SLIHSLIEESONQOEKNEQELLELDKWASLWNWF 34	RESULT 2 \$13288 cryprotein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997 C;Accession: \$13288 R;O'Brien, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, A.; Idler, K.; Zack, Nature 348, 69-73, 1990 A;Title: HIV-1 tropism for mononuclear phagocytes can be determined by regions of gpl A;Reference number: \$13288 A;Accession: \$13288 A;Accession: \$13288 A;Accession: \$13288 A;Residues: 1-854 <obr> C;Superfamily: type E retrovirus env polyprotein</obr>	QY 1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34 	Query Match 100.0%; Score 183; DB 2; Length 851; Best Local Similarity 100.0%; Pred. No. 4.1e-14; Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	submitted to the EMBL Data Library, November 1991 A;Reference number: \$33979 A;Accession: \$33985 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-851 <carp a;cross-references:="" c;superfamily:="" e="" embl:z11530;="" env="" nid:g60192;="" pid:g60199="" pidn:caa77628.1;="" polyprotein<="" retrovirus="" th="" type=""><th>RESULT 1 S33985 env polyprotein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999 C;Accession: S33985 R:Carlini, F.</th></carp>	RESULT 1 S33985 env polyprotein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999 C;Accession: S33985 R:Carlini, F.
		HIV-1 97 #text_change 31-0 , J.Q.; Diagne, A.; s can be determined 2172833	1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34	Query Match 100.0%; Score 183; DB 2; Length 851; Best Local Similarity 100.0%; Pred. No. 4.1e-14; Matches 34; Conservative 0; Mismatches 0; Indels 0; 1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34	bmitted to the EMBL Data Library, November 1991 Reference number: S33979 Accession: S33985 Status: preliminary Molecule type: mRNA Molecule type: mRNA Residues: 1-851 <car> Cross-references: EMBL:Z11530; NID:g60192; PIDN:CAA77628.1; PID:g6 Cross-references: EMBL:Z11530; NID:g60192; PIDN:CAA77628.1; PID:g60192; PI</car>

C; Species: human immunodeficiency virus

N; Alternate names:

polyprotein precursor - human immunodeficiency virus

type 1 (isolate HTLV-III,

вн10)

coat polyprotein

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A; Note: host Homo sapiens (man)
C; Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                            F;31-516/Product: exterior membrane y-rverous predicted <TMM>
F;517-861/Product: transmembrane glycoprotein status predicted <TMM>
F;887.1661/Product: transmembrane glycoprotein status predicted <TMM>
F;888,136,141,146,161,165,191,202,239,246,267,281,294,300,306,337,344,361,391,397,402,41
F;616,521,630,642,679,755,821/Binding site: carbohydrate (Asn) (covalent) #status predi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R; Wain-Hobson, S.; S
Cell 40, 9-17, 1985
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C; Date: 17-May-1985
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nature 313,
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                                                                                                                                                                                                                                                                                                                    C;Superfamily: type E retrovirus env polyprotein (c;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immun F;1-30/Domain: signal sequence #status predicted <SIG>F;1-516/Product: exterior membrane glycoprotein #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Title: Nucleotide sequence A; Reference number: A90866; 1 A: Accession: A03975
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-856 < RAT>
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N; Alternate name
                                   C41621
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Superfamily: type E retrovirus env polyprotein (Keywords: AIDS; capsid protein; coat protein; glycop: -30/Domain; signal sequence #status predicted (SIG)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Species: human immunodeficiency virus
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                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                    Molecule type: DNA residues: 1-861 <WAI> ross-references: GB:
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12-856/Product: transmembrane glycoprotein #status predicted <TMM>
8,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                J.A.; Papas, T.S.; Ghrayeb, 13, 277-284, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   names:
 names:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    precursor - human immunodeficiency virus
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   coat
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                                                                                                                                                                                                                                                                                                                                                                                                                                      GB:K02013; NID:g326417; PIDN:AAB59751
                   human
 polyprotein
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                                                                                                                                                                                                        100.0%;
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                   immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P.; Danos,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               e of the AIDS virus, MUID:85099333; PMID
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Pred. No. 4.1e-14;
                                                                                                                                                                                                          Score 183
Pred. No.
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                                                                                                                                                                                          Mismatches
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                     virus
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                   type 1 (fragment)
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Gallo, R.C.;
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Wong-Staal,
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VCLJ3W
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N;Contains: amino end of coat protein gp41; carboxyl end C;Species: human immunodeficiency virus type 1, HTV-1 A;Note: host Homo sapiens (man) C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_C;Accession: C41621 C; Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; F;1-251/Product: coat protein gp120 (fragment) #status predicted <GP1>F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2>F;424-443/Pomain: transmembrane #status predicted <TMN>F;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding R; Burger, H.; Weiser, B.; Flat Proc. Natl. Acad. Sci. U.S.A. A; Title: Evolution of human in A; Gene: env C; Superfamily: A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; A;Note: this virus was isolated from the mother's sexual par A; Molecule type: DNA A; Residues: 1-443 <BUR> A; Accession: C41621 A; Reference number: Query Match Best Local·S Matches 32 380 SLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 413 host Homo sapiens (man)
11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change Local Similarity es 32; Conserv ۲ SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF Weiser, B.; Flaherty, K.; Gulla, cad. Sci. U.S.A. 88, 11236-11240, type E retrovirus env polyprotein;
oS; capsid protein; coat protein; Conservative A41621; 95.18; 94.18; MUID: 92107924; PMID: 1763038 immunodeficiency virus type Score 174; Pred. No. 2 Mismatches 34 DB 2; .4e-13; J.; 1 Nguyen, Length 443 Indels of partner nucleotide P.N.; coat PID:g555015 26-Aug-1999 Gibbs, protein 0; Gaps sequence gp120 0 diversi, site

A;Molecule type: DNA
A;Residues: 1-856 <MUE>
A;Cross-references: GB:K02083; NID:g555008;
C;Genetics: A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; polyp
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp
F;1-30/Domain: signal sequence #status predicted <SIG>
F;31-511/Product: exterior membrane glycoprotein #status predicted <EXT>
F;512-856/Product: transmembrane glycoprotein #status predicted <TMM>
F;8136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,
F;611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre C; Accession: A03974 R; Muesing, M.A.; Sminature 313, 450-458, A; Note: host Homo sapiens (man) C; Date: 17-May-1985 #sequence_revision A; Accession: A; Molecule ty C; Species: human immunodeficiency virus type 1, env polyprotein precursor -A; Reference number: A93355; A; Title: Nucleic acid names: A03974 Similarity Smith, Conservative coat structure polyprotein D.H.; Cabradilla, C.D.; 95.1%; 97.0%; ture and expression of the MUID:85111157; PMID:298210 Score 174; Pred. No. immunodeficiency virus Mismatches 17-May-1985 #text_change PMID:2982104 PIDN: AAB59873.1; DВ 9e-13; HIV-1 Benton, 0 Length 856; human AIDS/lymphadenopathy C.V.; type 1 (isolate PID: g328559 Lasky, L.A.; Capon, 16-Jul-1999 0,: LV) 0, retr D.J pre

Query Match Best Local : SLIHSLIEESQNQQEKNEQELLELDKWANLWNW SLIHSLIEESQNQQEKNEQELLELDKWASLWNW 672 33

N;Contains: coat protein gp120; coat protein gp C;Species: human immunodeficiency virus type 1, C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1 env polyprotein precursor human immunodeficiency virus ype 1, HIV-1 -Sep-1988 #te gp41 #text_change type (isolate WMJ1)

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C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
C;Accession: S21994; S70421
R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; Hacke, W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N;Alternate names: coat polyprotein
C;SpecLes: human immunodeficiency virus type 1, HIV-1
A;Note: host Homo sapiens (man)
C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-1997
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             A; Molecule type: |
A; Residues: 1-357
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R;Starcich, B.R.; Hahn,
Cell 45, 637-648, 1986
                                                                               A; Accession: S21994
                                                                                                               A; Reference number:
                                                                                                                                                 A; Description:
                                                                                                                                                                             submitted to the EMBL Data Library,
                                                                                                                                                                                                                                                                                                                                             envelope protein gp120/gp41 - human immunodeficiency virus type C; Species: human immunodeficiency virus type 1, HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-861 <GUR>
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A; Residues: 1-856 <STA>
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Best Local Similarity
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94.1%;
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Pred. No. 5e-13;
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                                                                                                                                       HIV-1 in blood and cerebrospinal fluid
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                                                           A; Residues: 1-357 <ST2>
A; Cross-references: EMBL; X61356; NID: g60181; PIDN: CAA43624.1;
                                                                                                                                                                                                  A; Reference number: A; Accession: S70422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
A;Experimental source: patient 27L A;Note: submitted to the EMBL Data Library, July 1991
                                                                                                                                A; Molecule type: DNA
                                                                                                                                                                      A; Status: preliminary
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envelope protein gp120/gp41 - human immunodeficiency virus C:Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 28 C:Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_ch C;Accession: S21998; S70425 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; Hacke
AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency
A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                 envelope protein gpl20/gp41 - human immunodeficiency virus type 1 (patient 27L) C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999 C;Accession: S70422; S21996
                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-222,'X',224-358 <STE2>
A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991 A;Description: Distinct populations of HIV-1 in blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Notecute type: DNA
A; Residues: 1-140 'X', 142-312, 'X', 314-357 <STE2>
A: Residues: 1-140 'X', 142-312, 'X', 314-357 <STE2>
A: Cross-references: EMBL: X61355; NID: g60179
A: Cross-references: EMBL: X61355; NID: g60179
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A; Title: Distinct populations of human immunodeficiency
A; Reference number: S70417; MUID:92144209; PMID:1736940
                                                              R;Steuler,
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AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immu
A;Reference number: S70417; MUID:92144209;
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A; Residues: 1-358 <STE1>
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Best Local
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                                            Storch-Hagenlocher, B.; Wildemann, Retroviruses 8, 53-59, 1992
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Retroviruses 8, 53-59, 1992
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91.2%;
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Pred. No. 4.3e-13;
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Pred. No. 4.3e-13;
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209; PMID:1736940
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PID:g1067129

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RESULT 12
T09448
C;Species: human immunodeficiency virus type 1, HIV-1
A;Note: host Homo sapiens (man)
C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999
C;Accession: A41621
R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, P.N.; Gibbs, R.A.
                                                                                                                            env polyprotein M - human immunodeficiency virus type 1 (fragment) W;Alternate names: coat polyprotein N;Contains: amino end of coat protein gp41; carboxyl end of coat protein gp120 C;Species: human immunodeficiency virus type 1, HIV-1
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A;Molecule type: DNA
A;Residues: 1-847 <PAN>
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R; Pang, S.; Vinters, H.V.;
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Nature 348, 69-73, 1990
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Residues: 1-847 <OBR>
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Pred. No. 3.4e-12;
Pred. No. 3.4e-12;
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142

1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

SLIYTLIEESQNQQEKNEQDLLELDKWDSLWNWF

175

2003,

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C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; pol F;1-253/Product: coat protein gp120 (fragment) #status predicted <GP1> F;254-445/Product: coat protein gp41 (fragment) #status predicted <GP2> F;254-445/Pomain: transmembrane #status predicted <TMN> F;9,23,42,48,78,85,101,107,131,137,143,147,152,155,190,205,353,358,367,379/Binding
                                                                                      A;Molecule type: DNA
A;Residues: 1-333,'X',335-358 <STE2>
A;Cross-references: EMBL:X61352; NID:g60186
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                             R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.
AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency
A;Reference number: 870417; MUID:92144209; PMID:1736940
A;Accession: S70418
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data Library, A;Description: Distinct populations A;Reference number: S21990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Species: human immunodeficiency virus A; Variety: isolate 3L C; Date: 20-Feb-1995 #sequence_revision C; Accession: $22002; $70418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        envelope protein gpl20/gp41 - human immunodeficiency virus C;Species: human immunodeficiency virus type 1, HIV-1 \,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-358 <STE1>
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                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: S22002
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30;
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                        Pred.
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the European Bioinformatics Institute. There use by non-profit institutions as long as a
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MEDLINE-87299196; PubMed=3040055;
Ratner L., Fisher A., Jagodzinski L.L.,
Gallo R.C., Wong-Staal F.;
"Complete nucleotide sequences of functivirus.";
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Submitted (APR-1997) to the
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NCBI_TaxID=11706;
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IPR000777; GP120.
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GP160 precursor [Contains: Exterior membrane
; Transmembrane glycoprotein (GP41)].
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l F.;
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es; Retroviridae; Lentivirus.
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TRANSMEMBRANE GLYCOPROTEIN.
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P04624;
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SIGNAL
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01-FEB-1996 (Rel. 33, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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MEDLINE-85228248; PubMed=2988795;
CIOWl R., Ganguly K., Gordon M., C
Shaw G.M., Wong-Staal F., Reddy E.
                                                                                                                                         AIDS;
                                                                                                                                                                                       EMBL; M14100;
HIV; M14100;
                                                                                                                                                                                                                              use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See
                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the El the European Bioinformatics Institute. There are no resti
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                                  between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
       EMBL; U12055; AAA76690.1; -. GlycoSuiteDB; Q70626; -.
                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                   Reitz M.S. Jr., Hall L., Robert-Guroff M., Laut. Shaw G.M., Kong L.I., Weiss S.H., Waters D., Ga "Viral variability and serum antibody response infected with HIV type 1 (HTLV type IIIB)."; AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Viruses; Retroid viruse
NCBI_TaxID=82834;
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34; Conserv
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998 (Rel. 36, Last sequence update)
999 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains: Exterior membrane
tein (GP120); Transmembrane glycoprotein (GP41)]
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ss; Retroviridae; Lentivirus.
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Pred. No. 6.5e-15;
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RESULT 6
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AC P03377;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence u,
DT 15-JUL-1999 (Rel. 38, Last annotation
DE Envelope polyprotein GP160 precursor (CDE glycoprotein (GP120); Transmembrane gly
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotein;
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EMBL; A04321; CAA00352.1; -.
PIR; A03975; VCLJLV.
HIV; K02013; ENV$BRU.
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J. Virol. 64:3792-3803(1990).
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999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains:
tein (GP120); Transmembrane glycoproteir
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IPR000328; Env_GP41.
IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Usage
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a collaboration - MBL outstation -

(POTENTIAL)

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P03376;
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CARBOHYD
                                                                                                                    InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; Gp120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotei
                                                                                                                                                                             EMBL; K02083; AAB59873.1; EMBL; X01762; CAA25903.1; ALT_SEQ. PIR; A03974; VCLJVL. HIV; K02083; ENV$PV22.
                                                                                                                                                                                                                                       entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no was modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         glycoprotein
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Capon D.J.;
                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE-85111157;
                                                                                                                                                                                                                                                                                                                                                                                                                          Viruses; Retroid viruses; NCBI_TaxID=11700;
                                                                                                                                                                                                                                                                                                                                     Nature
                                                                                                                                                                                                                                                                                                                                               AIDS/lymphadenopathy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Envelope
                                                                                                                                                                                                                                                                                                                                                                                                                                       juman immunodeficiency virus type 1 (PV:
jiruses; Retroid viruses; Retroviridae;
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1986 (Rel. 01, I
1999 (Rel. 38, I
e polyprotein GP
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Smith D.H., Cabradilla
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, Last annotation update)
GP160 precursor [Contains: Exterior membrane
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97.1%;
                                                                                                                                                                                                                                                                                                                                               retrovirus.
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EXTERIOR MEMBRANE GLYCOPROTEIN.
TRANSMEMBRANE GLYCOPROTEIN.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                               expression irus.";
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                                                                                                                    Glycoprotein; Transmembrane;
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                                                                                                                                                                                                                                                                                                                                                          the human
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Matches 3
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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: 91ycoprotein (GP120); Transmembrane glycoprotein ENV.
                                                      "Envelope sequences of two new United States HIV-1 isolates.";
"Invelope 164:531-536(1988).
"In MISCELLANEOUS: THE SC ISOLATE WAS TAKEN FROM AN ARC PATTENT 1984 IN SOUTHERN CALIFORNIA.";
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P05878;
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                                                                                                                                                                          SEQUENCE FROM N.A.
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NCBI_TaxID=11702;
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  non-profit instituend this statement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                 viruses;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95.1%;
97.0%;
               institutions
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es; Retroviridae;
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M17450; ENV$SC.
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32; Conser
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SEQUENCE FROM N.A.
STATCICH B.R., Hahn B.H., Shaw G.M., McNeely P.D., V. Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V. Parks E.S., Parks W.P., Josephs G. Parks E.S., Parks W.P., Josephs G. Parks E.S., Parks W.P., Josephs G. Parks W.P., Parks E.S., Parks W.P., Josephs G. Parks W.P., Parks E.S., Parks W.P., Parks W.P
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane
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-!- MISCELLANEOUS: ISCLATES WMJ1, WMJ2, AND
-!- BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A
WAS PERINATALLY INFECTED BY HER MOTHER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1 (WMJ1 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=31678;
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Interpro; IPR000777; G
Pfam; PF00516; GP120;
Pfam; PF00517; GP41; 1
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LIVIS3. STANDARD; PRT; 852 AA. P19549;
01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: E glycoprotein (GP120); Transmembrane glycoprotein
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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NCBI_TaxID=11690;
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viruses; Retroviridae; Lentivirus
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                                                                                                                                                                                                                                                                                       AIDS;
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InterPro; IPR000328; Env_GP41
InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=90347835;
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polyprotein GP160 precursor (Contains:
tein (GP120); Transmembrane glycoproteir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Retroid
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Retroviridae; Lentivirus.
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STANDARD; PRT; 847 AA.

AC P05880;
DT 01-NOV-1988 (Rel. 09, Created)
DT 01-NOV-1988 (Rel. 09, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE Envelope polyprotein GP160 precursor [Contains: Ext
DE glycoprotein (GP120); Transmembrane glycoprotein (G
ENV.
OS Human immunodeficiency virus type 1 (WMJZ isolate)
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
RN [1]
RP SEQUENCE FROM N.A.
MEDLINE-86235450; PubMed-3012778;
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OR InterPro; IPR000328; Env_GP41.
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polymore.
Signal.
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Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R., Markham P.D. Salahuddin S.Z., Wong-Staal F., Gallo R.C., Parks E.S., Parks "Genetic variation in HTLV-III/LAV over time in patients with at risk for AIDs.";
Science 232:1548-1553(1986).
-i- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND WMJ3 WERE OBTAINED BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A TWO-YEAR OLD HAITI. WAS PERINATALLY INFECTED BY HER MOTHER.
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                                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type 1 (WMJ2 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus.
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NCBI_TaxID=11694;
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               MEDLINE-89352108; PubMed-2669897; Komiyama N., Hattori N., Inoue J., Sakuma S., "Nucleotide sequences of gag and env genes of "Nucleotide sequences of in bacteria."; hattori nucleotide sequences of sag and env genes of "Nucleotide sequences" and sag an
                                                                                                                                                                                                                                        01-OCT-1989 (Rel. 12, Created)
01-OCT-1989 (Rel. 12, Last sequence update)
01-OCT-1989 (Rel. 13, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Eglycoprotein (GP120); Transmembrane glycoprotein
                                                                                                                                                                                                                              glycoprotein ENV.
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Viruses; Retroid viruses; Retroviridae;
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TRANSMEMBRANE GLYCOPROTEIN.
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RESULT 15
ENV_HV1MN
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Matches 31
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HIV; M21138; ENV$JH3
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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91.2%;
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BY SIMILARITY

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Pred. No. 6.1e
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Gurgo C., Guo H.-G., Franchini G., Aldovini A., Collalti E., Farrell K., Wong-Staal F., Gallo R.C., Reitz M.S. Jr.;
"Envelope sequences of two new United States HIV-1 isolates."
Virology 164:531-536(1988).
--- MISCELLANEOUS: THE MN ISOLATE WAS TAKEN FROM A PEDIATRIC PATIENT IN 1984.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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15-JUL-1999 (Rel. 38, Last
Envelope polyprotein GP160
glycoprotein (GP120); Trans
ENV
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NCBI_TaxID=11696;
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HIV; M17449; ENV$MN
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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InterPro; IPR000777; GP120
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  Polyprotein; Glycoprotein; Transmembrane;
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GP160 precursor [Contains: E
Transmembrane glycoprotein
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                  (POTENTIAL)
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FT CARBOHYD 612 612 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 626 626 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 638 638 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 638 638 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 816 816 N-LINKED (GLCNAC. .) (POTENTIAL).
SQ SEQUENCE 856 AA; 97140 MW; D197D809940BF732 CRC64;

Query Match
Best Local Similarity 88.2%; Pred. No. 1. le-12;
Matches 30; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 SLIHSLIEESONOQEKNEQELLELDKWASLWNWF 34
Db 641 SLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 674

Search completed: May 16, 2003, 11:13:33

Job time: 5.73494 secs
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OM protein - protein search, using sw model
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sp_rodent:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution:

sp_unclassified:*
sp_rvirus:*
sp_bacteriap:*
sp_archeap:*

SUMMARIES

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7	183	100.0	851	15	Q78243
90	183	100.0	854	15 0	085582
10	183	100.0	854	15	Q72502
11	183	100.0	856	15	092877
12	.183	100.0	856	15	Q74599
14	179	97.8	854	15	090178
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Q8UL78	Q8UL82	Q8UL83	Q8UL84	080850	Q8UL73	Q8UL77	Q8UL79	Q8UL80	Q8UL85	Q8UL88	Q8UL90	Q8UL70	041539	Q72993	Q8Q852	056110	Q8Q851	Q77368	041556	Q80023	069910	Q03805	Q78225	Q03806	. 069990	Q9Q722	Q993B2	Q993B0
Q8u178	Q8u182	Q8u183	Q8u184	Q8q850	Q8u173	Q8u177	Q8u179	Q8u180	Q8u185	Q8u188	Q8u190	Q8u170	041539	Q72993	Q8q852	056110	Q8q851	Q77368	041556	Q80023	Q69910	Q03805	Q 7 8225	Q03806	Q69990	Q9q722	0993b2	Q993b0
		human	human	human	human	human	human																					
immun	immun	immun	immun	immun	immun																							

ALIGNMENTS

RESULT 1 0993A6 PRELIMINARY; PRT; 645 AA. AC 0993A6, DT 01-JUN-2001 (TrEMBLrel. 17, Created) DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update) DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update) DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update) DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update) DE Truncated envelope 91ycoprotein (Fragment). ON UPDEC-2001 (TrEMBLrel. 19, Last annotation update) DE Truncated envelope 91ycoprotein (Fragment). ON UPDEC-2001 (TrEMBLrel. 19, Last annotation update) DE RIN. ON UPDEC-2001 (TrEMBLrel. 19, Last annotation update) DE RIN. ON UPDEC-2001 (TrEMBLrel. 19, Last annotation update) DE RIN. ON UPDEC-2001 (TrEMBLrel. 19, Last annotation update) DE RIN. ON UPDEC-2001 (TrEMBLrel. 19, Last annotation update) DE UPDEC-2001 (TrEMBLrel. 19, Last sequence update) DE UPDEC-2001 (TrEMBLrel 19, Last sequence update) DE UPDEC-2001																						
1 993A6 993A6 9PRELIMINARY; PRT; 645 AA. 993A6; 1-JUN-2001 (TrEMBLrel. 17, Created) 1-JUN-2001 (TrEMBLrel. 17, Last sequence update) 1-DCC-2001 (TrEMBLrel. 19, Last sequence) 2-DCC-2001 (TrEMBLrel. 19, Last sequence) 2-DCC-2002 (TrEMBLrel. 19, Last sequence) 2-DCC-2002 (TrEMBLrel. 19, Last sequence) 2-DCC-2002 (Tremble 19, Last sequence) 2	Qy Db	Д Ве Ма	SO	₩ DR	DR DR	DR DR	P.F.	작곡	RT	RA P	RX	20 2	R	ΟX	200	GN	D D	DT	DT	AC	ID	RESU
	SLIHSLIEESONQQEKNEQELLELDKWASLWNWF	100.0%; Score 183; DB 15; Length 645; 100.0%; Pred. No. 3.3e-14; vative 0; Mismatches 0; Indels 0; Gaps	brane. 1 1 645 AA; 72485 MW; B076514BE93362EC	GP41; tein;	Pro;	EMBL; AF321563; AAK18810.1; InterPro; IPR000328; Env_GP41.	Natl. Acad. Sci. U.S.A.	glycoprotein suggests structural influences	tspots to exposed strands	nes B.,	MEDLINE=21192672; PubMed=11287644;	STRAIN=1007;		NCBI_TaxID=11676;	Human immunodeficiency virus type 1, Viruses: Retroid viruses: Retroviridae: Lentivirus.		onvelope glycoprof	(TrEMBLrel. 17,	(TrEMBLrel. 17,		993A6 PRELIMINARY: PRT: 645	LT 1

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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protain; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 747 747
SEQUENCE 747 AA; 84250 MW; 732E836A52245F14 CRC64;
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Submitted (JUL-1994) to EMBL; U12032; AAA76668.1
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                                                      Mulder K.E.;
                                                                                  STRAIN-LW881;
                                                                                                                                                         Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W "Viral variability and serum antibody response in a laboratinfected with HIV type I (HTLV type IIIB).";
                                                                                                                                                                                                                                                                                            MEDLINE-95127297; PubMed=7826699;
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                            EMBL/GenBank/DDBJ databases
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Pred. No. 3.8e-14;
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01-DEC-2001 (TrEMBLrel:
Envelope glycoprotein (F
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InterPro: IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
 Viruses; Retroid viruses; NCBI_TaxID=11676;
                                 ENV.
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InterPro;
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                       Human immunodeficiency virus type
                                          Envelope glycoprotein
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Viruses; Retroid viruses; Retroviridae;
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                                                                                                                                                                                                                                                                       AIDS;
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                                                                                                                                                                                                                                                                                                                                                            STRAIN=LW851;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=95127297; PubMed=7826699;
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IPR000777; GP120.
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No. 3.9e-14;
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Q70608;
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W
"Viral variability and serum antibody response in a laborat
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Reitz M., Hall L., Robert-Guroff M., Lautenberger
Shaw G., Kong L., Weiss S., Weters D., Gallo R., B
"Viral variability and serum antibody response in
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                     NON_TER
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InterFo; IPRO00777; GP120.
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SEQUENCE
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Viruses; Retroid viruses; Retroviridae;
                                                                                                                                                      AIDS;
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                                                                                                                                                                                                                                                           Submitted
                                                                                                                                                                                                                                                                         Mulder K.E.;
                                                                                                                                                                                                                                                                                          STRAIN=LW87-2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Viruses; Retroid
NCBI_TaxID=11676;
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01-DEC-2001
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InterPro; IPR000777; GP120.
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PF00517; GP41; 1
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larity 100.0%;
Conservative (
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                                                                                                                     84780 MW;
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                                                 Score 183; I
Pred. No. 3.9
D; Mismatches
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Q89797;
Q1-NOV-1996
Q1-NOV-1996
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Q78243;
Q1-NOV-1996
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"Sequence analysis of HIV-1
chronically infected HUT-78
MEDLINE-95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W
"Viral variability and serum antibody response in a laborat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AIDS
                                                                SEQUENCE FROM N.A.
STRAIN-LW90-2;
                                                                                                                Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
                                                                                                                                                                      ENV.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AIDS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               productive clone."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Titti F., Federico M., Butto S., Orecchia A., Borsetti A., Saggio I., Verani P., Rossi G.; "Variability of HIV-l virus: characteristics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Biological and molecular characterization of producer and producer clones from HUT-78 infected with a patient HIV isc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=89352106; PubMed=2765297;
Federico M., Titti F., Butto S., Orecchia P
Macchi B., Mangiano N., Verani P., Rossi G.
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Viruses; Retroid viruses; Retroviridae;
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01-DEC-2001
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Z11530; CAA77628.1; -.
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851 AA; 96630 MW; 1A3767B9B7E98027 CRC64;
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Pred. No. 4.4e-14;
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Carlini F., Taddeo B.,

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Blattner W.;

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Ratti G., Zibai Q.,

Carlini F.,

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Query Match
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Q85582;
01-NOV-1996
                                                                                                                                          Buckler C.
Submitted
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                              Interpro; IPR000328; Env_GP41.
Interpro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
                                                                                     gp41 resultis in loss of
lymphocytes.";
                                                                                                                   SEQUENCE FROM N.A. MEDLINE-92219406;
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01-DEC-2001
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Interpro; IPR000777; GP120.
Pfam; PF005516; GP120; 1.
Pfam; PF00517; GP41; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AIDS
                        SEQUENCE
                                                                                          molecular clone."
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                                                                                                                                                                                                                                                                                                          Envelope polyprotein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                    J. Virol. 66:3151-3154(1992).
EMBL; M19921; AAA44992.1; -.
                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                      retrovirus in human and
                                                                                                                                                                                                                                              Adachi A., Gendelman
                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type
                                                                                                                                                                                                                                        Martin M.A.;
                                                                                                                                                                                                                              "Production of acquired
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Similarity
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                                                                                                                                          (JUL-1989)
                        protein;
854 AA;
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llarity 100.0%;
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                       Glycoprotein;
97124 MW; ABF
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EMBL/GenBank/DDBJ databases.
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Last annotation updat
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Pred. No. 4.4
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Score 183;
Pred. No.
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                       n; Polyprotein; Transmembrane ABAOA1BF36D5595A CRC64;
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                                                                                           Ennis F.A.;
virus type 1 at amino acid 585 on
CD8+ A24-restricted cytotoxic T
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4.4e-14;
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RESULT 10
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Best Local S
Matches 34
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R InterPro; IPR000777; GP120.

Pfam; PF00516; GP120; 1.

Pfam; PF00517; GP41; 1.

AIDS; Coat protein.

CONFLICT
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092877;
01-NOV-1998
01-NOV-1998
01-DEC-2001
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SEQUENCE
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Q72502;
Q1-NOV-1996 (TrEMBLrel. 01,
Q1-NOV-1996 (TrEMBLrel. 01,
Q1-DEC 2001 (TrEMBLrel. 19,
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[2]
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                                    Viruses; Retroid viruses;
NCBI_TaxID=57667;
                                               ENV.
Simian-Human immunodeficiency virus.
Simian-Human immunodeficiency virus.
                                                                            ENV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     molecular clone.";
J. Virol. 59:284-291(1986).
EMBL; U26942; AAB60578.1;
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SEQUENCE FROM N.A. MEDLINE=99098984;
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739 739 G ->
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 PubMed=9882298
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-> S (IN REF. 2).
-> D (IN REF. 2).
FF2264B3841D1220 CRC64;
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Q74599;
01-NOV-1996
01-NOV-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Changes in human immunodeficiency virus type 1 envelope responsible for the pathogenicity of a multiply passaged immunodeficiency virus (SHIV-HXBc2).";
J. Virol. 73:976-984(1999).
                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                       Pfam;
                                                                                                                                                                                                                                                     Submitted (JUN-1996) to the EMBL/GenBank/DDBJ
EMBL; D86068; BAA12995.1; -
InterPro; IPR000328; Env GP41.
InterPro; IPR000777; GP120.
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"Spectrum of Biological Properties
'UTV-1' Isolates.":
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Viruses; Retroid viruse
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InterPro; IPR000777; GP120.
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Halloran M., Axthelm M.W.,
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NCE 856 AA; 97151 MW; C50BE0388FB73659
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856 AA;
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larity 100.0%;
Conservative
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97287 MW; 238042A234C56685
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es; Retroviridae;
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Letvin N.L., Sodroski J.G.;
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                                                                                Score 183; DB 15;
Pred. No. 4.4e-14;
Mismatches 0;
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Pred. No. 4.4e-14;
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Pfam; PF00517; GP41; 1
AIDS; Coat protein; Gly
SEQUENCE 856 AA; 97:
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01-NOV-1998
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                        InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q74090
Q74090;
                                                                                                                                                                          immunotoxin-resistant variant T cell line.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ
EMBL; AF070521; AAC28452.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type Viruses; Retroid viruses; Retrovir NCBI_TaxID=11676;
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"Spectrum of Biological Properties
(HIV-1) Isolates.";
Virology 174:103-116(1990).
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                                                                                                                                                                                                                                                                                                                                                                                J. Virol.
                                                                                                                                                                                                                                                                                                                                                                                                               selected with immunotoxins infected T cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fang H., Pincus S.H.;
"Unique insertion sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=95074930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENV.
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                                                                                                                                                                                                                                                                                         Fang H.,
                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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Glycoprotein; Polyprotein; T
96885 MW; 0808F3AED27C693B
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Best Local Similarity 97.1%;
Matches 33; Conservative
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                                                                                                                                                                                                                                                  Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                           Envelope glycoprotein gp120.
Score 179; DB 15;
Pred. No. 1.3e-13;
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Result
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Listing first 45 summaries
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/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*
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US-08-474-349A-416
US-09-315-304B-638
US-09-315-304B-799
US-08-486-099-1
US-08-486-099-1
US-08-486-177-1
US-08-484-223B-1
US-08-484-223B-231
US-08-484-223B-231
US-08-484-223B-231
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US-08-484-223B-231
US-08-485-5668A-1
US-08-475-668A-1
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	US-08-474-349A-401	US-08-474-349A-400	US-08-474-349A-399	US-08-474-349A-1	US-09-045-920-1	US-08-965-056-108	US-08-965-056-1	US-09-082-279B-1161	US-09-082-279B-1121	US-09-082-279B-1076	US-09-082-279B-834	US-09-082-279B-705	US-09-082-279B-631	US-09-082-279B-630	US-09-082-279B-603	US-09-082-279B-561	US-09-082-279B-560	US-09-082-279B-498
00400000 +0+/- +166	-	-	Sequence 399, App	Sequence 1, Appli	Sequence 1, Appli		Sequence 1, Appli	Sequence 1161, Ap	Sequence 1121, Ap	Sequence 1076, Ap	Sequence 834, App	Sequence 705, App	Sequence 631, App	Sequence 630, App	Sequence 603, App	Sequence 561, App	Sequence 560, App	Sequence 498, App

ALIGNMENTS

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; MOLECULE TYPE: US-08-073-028-73
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US-08-073-028-73
                                                       Matches
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                                                                                      Query Match
                                                                                                                                                                                                                           TELEFAX: (212) 869-88
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Releacurement AppLICATION DATA:
APPLICATION NUMBER: US/(
FILING DATE: 07-JUN-199:
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 34 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Bolognesi, Dani P.
APPLICANT: Matthews, Thomas J.
APPLICANT: Wild, Carl T.
TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV
TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: New York
STATE: New York
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ZIP: 10036
                                                                                                                                                           TOPOLOGY:
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TELEFAX: (212) 869-8864/9741
                                                                        Local Similarity
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1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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                                                                                                                                                            unknown
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N: 514
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                                                                    Score 183; DB 1;
Pred. No. 2.6e-16;
                                                     Mismatches
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                                                                                    Length 34;
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                                                                                                                                                                              GENERAL INFORMATION:
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                                                                                                                                                                                             Patent No.
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FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                              APPLICANT:
                                                                                                                                             APPLICANT:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/073,028
FILING DATE: 07-JUN-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
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OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: New York
STATE: New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER:
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                                                                                                                            Guthrie, Kelly
Merutka, Gene
                                                                                                                                                              Barney, Shawn
                                                                                                             Anwer, Mohmed
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matthews, Thomas J.
                                                                                                                                                                                                                                                                                                                                                          Conservative
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SYSTEM: PC-DOS/MS-DOS
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Pred. No. 2.6e-16;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 800\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                         Sequence 74, Application US/08073028 Patent No. 5464933
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/082,279
PRIOR PLICATION NUMBER: 09/082,279
PRIOR FILING DATE: 1998-05-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Barney, S. APPLICANT: Guthrie, K. APPLICANT: Merutka, G.
                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 1667
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                     APPLICANT: Matthews,
APPLICANT: Wild, Car
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH: 34
                                                                                              NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS: Pennie &
                                                                                                                                                                                                                       APPLICANT:
COMPUTER READABLE FORM:
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                              COUNTRY:
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                                                 STATE:
                                                                  CITY:
                                                                                  STREET:
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5. 6348568
                 10036
                                                New York
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                                                                                     1155 Avenue of the Americas
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ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                       Matthews, Thomas J
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                                                                                                                                                     SYNTHETIC PEPTIDE INHIBITORS OF HIV TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 183; DB 4;
100.0%; Pred. No. 2.6e-16;
Live 0; Mismatches 0;
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Pred. No. 2.6e-16
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

PatentIn Release #1.0, Version #1.25

MEDIUM TYPE:

Floppy disk

SOFTWARE:

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RESULT 6
US-08-484-223B-234
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: COTUZZI, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7872-004-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.30 CURENT APPLICATION DATA: APPLICATION NUMBER: US/08/484,223B FILING DATE: 07-UN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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TITLE OF INVENTION:
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TOPOLOGY: unknown
                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                            STREET: 1155 Avenue of the Americas CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 07-JUN
 TELEFAX:
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ZIP: 10036-2711
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                 TELEPHONE:
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Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
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: (212) 790-9090
(212) 869-9741/8864
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Lambert, Dennis M.
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100.0%; P
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Pred. No. 2.7e-16;
Mismatches 0;
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                                  Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 35 amino acids
                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 07-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy
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                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: U
ZIP: 10036
                                                                                                                       TOPOLOGY:
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STREET: 1155 Avenue of the Americas
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                                             Local Similarity
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                                                                                                                                                                                                                                                                                           NAME:
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   SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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o. 6133418
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                                                                                                                                                    35 amino acids
                                                                                                                                                                                                               : (212) 790-9090
(212) 869-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                 Conservative
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                                                                                                                         unknown
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                                             100.0%; Score 183; DB 4; 100.0%; Pred. No. 2.7e-16;
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                                 Mismatches
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RESULT 10
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Sequence 416, Application US/08474349A Patent No. 6333395 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/082,279B
UNRENT FILING DATE: 1998-05-20
UMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 799
SEQ ID NO 799
TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity 100.
34; Conservative
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 638
LENGTH: 35
TYPE: PRT
ORGANISM: Artificial Sequence
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APPLICANT:
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Best Local :
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APPLICANT:
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICAMY: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TILE REFERENCE:
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OTHER INFORMATION: Core polypeptide
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                                                                                                                       1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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ANT: Barney, Shawn
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ANT: Barney, Shawn
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Merutka, Gene
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Merutka, Gene
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Pred. No. 2.7e-16;
0; Mismatches 0;
                                                                                                                                                                                            Score 183; DB 4;
Pred. No. 2.7e-16;
Mismatches 0;
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US-09-315-304B-638
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                                                                                                                                                                                                                                                                                                                       Patent No. 6348568 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 183; DB 4; Best Local Similarity 100.0%; Pred. No. 2.7e-16; Matches 34; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                              Sequence 638, Application US/09315304B
SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 638
                                                           CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/082,279
PRIOR FILING DATE: 1998-05-20
                                                                                                                                                APPLICANT: LAMBERT, D. TITLE OF INVENTION: PROPERTIES WITH ENHANCED PHARMACOKINETIC TITLE OF INVENTION: PROPERTIES FILE REFERENCE: 7872-052
                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                            APPLICANT: Barney, S. APPLICANT: Guthrie,
                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 35 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/474,349A
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1155 A
CITY: New York
STATE: New Yor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 10036-2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                      Guthrie, K.
Merutka, G.
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                                                                                                                                                                                                                                  Anwer, M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lambert, Dennis M.
Petteway, Stephen R.
Langlois, Alphonse J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matthews, Thomas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Barney, Shawn O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wild, Carl T.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VIRUS TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HUMAN PARAINFLUENZA
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; OTHER INFORMATION: Core polypeptide US-09-315-304B-799
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; Sequence 799, Application US/09315304B
Ratent No. 6348568
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APPLICANT: Barney, S.
APPLICANT: Guthrie, K.
APPLICANT: Merutka, G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/082,279
PRIOR FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1667
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                       Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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APPLICANT: Lambert, D.
APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
FILE REFERENCE: 7872-052
                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 35
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Core polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 35
                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                         APPLICANT: Bolognesi, Dani P. APPLICANT: Matthews, Thomas J. APPLICANT: Wild, Carl T.
                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                        TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                      CITY: New York
STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                              STREET:
                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
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                                                          10036
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                                                                                                                                                                                                                                                                                                                                       Application US/08073028
                                                                                                                              1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
I: Floppy disk
IBM PC compatible
                                                                                                                                                    Pennie & Edmonds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 183; DB 4;
Pred. No. 2.7e-16;
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В
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US-08-486-099-1
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                                                                                                                                                                                                        COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: TEM PC PCS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
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TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 07-JUN-199
CLASSIFICATION: 514
                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patenth Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 78:
TELECOMMUNICATION INFORMATION:
                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                                              TELEPHONE: (212) 790-9090
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                             TELEFAX:
                                                                                              NAME: Coruzzi, Laura
REGISTRATION NUMBER:
                                                                                                                                                               APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                STATE:
                                                                                                                                                                                                                                                                                                                                                             STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 36 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM:
SOFTWARE: PatentI
                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08486099
6013263
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                                                                                                                                                                                                                                                                                                                              New York
               66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                               1155 Avenue of the Americas
                                (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Langlois, Alphonse J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Petteway, Stephen R.
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Lambert, Dennis M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                              Pennie & Edmonds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1993
                                                                                                            Laura A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                              B VIRUS TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS
                                                                                                                                                                              US/08/486,099
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                                                                                7872-031
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Pred. No. 2 8e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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APPLICANT: Lichty, Maynard
APPLICANT: Mader, Catherine
APPLICANT: Mader, Catherine
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEPTIDE SYNTHESIS
FILE REFERENCE: 782-050
CURRENT APPLICATION NUMBER: US/09/071,877
CURRENT FILING DATE: 1998-05-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 36
CORGANISM: Human immunodeficiency virus
US-09-071-877-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
US-08-486-099-1
     DЪ
                                   Q
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US-09-071-877-1
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                                                                    Query Match 100.0%; Score 183; DB 3; Length 36; Best Local Similarity 100.0%; Pred. No. 2.8e-16; Matches 34; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                          equence 1, Application US/09071877
tent No. 6015881
ENERAL INFORMATION:
APPLICANT: Kang, Myung-Chol
APPLICANT: Bray, Brian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
Length 36;
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                                                                        0;
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                                                                        Gaps
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rch completed: May 16, 2003, 11:22:11 time: 9.62651 secs

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Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            May 16, 2003, 11:20:00; Search time 14.8835 Seconds (without alignments) 220.333 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-623-533A-118
183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    362588 seqs, 96450795 residues
                                                                                                                                                                                                                                                                                                                                                                                                                  Published_Applications_AA:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                     /cgn2_6/ptodata/1/pubpaa/PCTUS_pUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USOB_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USIO_NEW_PUB.pep:*
                                                                                                                                                                                                                               /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

. 19	18	17	16	15	14	13	12	11	10	9	8	7	6	ر ت	4	w	2	- -	Result No.
183	183	183	183	183	183	183	183	183	183	183	183	183	183	183	183	183	183	183	Score
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query Match
268	268	268	256	254	232	221	177	56	46	37	36	36	36	36	36	36	36	36	Query Match Length
10	10	10	9	9	9	9	9	10	10	9	10	10	10	10	10	9	9	9	DB
US-09-854-816-18	US-09-854-816-17	US-09-854-816-16	US-10-059-271-97	US-10-059-271-82	US-10-059-271-81	US-10-059-271-84	US-10-040-349B-2	US-09-779-451-4	US-09-779-451-41	US-09-848-616-176	US-09-854-816-108	US-09-854-816-1	US-09-834-628-1	US-09-779-451-5	US-09-796-202-10	US-09-493-346-1	US-10-116-797-1	US-09-874-475-16	ID
Sequence 18, Appl	Sequence 17, Appl	Sequence 16, Appl	Sequence 97, Appl	Sequence 82, Appl	٠.	Sequence 84, Appl	Sequence 2, Appli	Sequence 4, Appli	Sequence 41, Appl	Sequence 176, App	10	۳,	μ,	Sequence 5, Appli	Sequence 10, Appl	Sequence 1, Appli	Sequence 1, Appli	Sequence 16, Appl	Description

45	44	43	42	41	40	39	38	37	36	3 5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
170	170	170	171	171	171	171	172	173	174	174	174	175	177	180	180	183	183	183	183	183	183	183	183	183	183
	92.9					93.4	94.0	94.5		95.1	95.1	95.6	96.7	98.4	98.4	100.0		100.0	100.0					100.0	100.0
268	267	46	847	646	619	268	269	269	269	268	233	268	1231	268	36	1186	1101	861	856	853	519	391	345	345	344
10	10	10	10	10	10	10	10	10	10	10	10	10	9	10	10	9	9	9	10	9	10	9	10	9	9
·US-09-854-816-41	US-09-854-816-38	US-09-854-816-109	US-09-476-242-2	US-09-891-609-2	US-09-891-609-4	-816	US-09-854-816-28	US-09-854-816-46	US-09-854-816-12	US-09-854-816-9	US-09-854-816-50	US-09-854-816-13	US-10-059-271-94	US-09-854-816-19	US-09-912-824-1	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	US-10-040-349B-1
-	ς.	109	2	Sequence 2, Appli	Sequence 4, Appli	26	Sequence 28, Appl	•	12	Sequence 9, Appli	Sequence 50, Appl	e 13	94,	19,		•	53,	103	•	•	•	•	٠.	Sequence 49, Appl	Sequence 1, Appli

ALIGNMENTS

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Sequence 1, Application US/10116797

Publication No. US20030044411A1

GENERAL INFORMATION:
APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING HIVETILE APPLICATION NUMBER: US/10/116,797

CURRENT APPLICATION NUMBER: US/10/116,797

CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                     RESULT 2
US-10-116-797-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; SEQ ID NO 16
LENGTH: 36
; TYPE: PRT
; ORGANISM: Fusion Inhibitor Peptide
US-09-874-475-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-874-475-16

: Sequence 16, Application US/09874475

; Publication No. US20020182592A1
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 183; DB 9; Best Local Similarity 100.0%; Pred. No. 2.7e-15; Matches 34; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS FILE REFERENCE: 2793/65166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Petropoulos, Christos J. APPLICANT: Parkin, Neil T. APPLICANT: Whitcomb, Jeanette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                              Huang, Wei
                                                                            HIV-1 INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
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NUMBER OF SEQ ID NOS: 5

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; SEQ ID NO 1; LENGTH: 36; TYPE: PRT; ORGANISM: Homo sapiens US-10-116-797-1
                                                     ; NAME/KEY: PEPTIDE
; LOCATION: (1)..(36)
; OTHER INFORMATION: T-20
US-09-796-202-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-493-346-1
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                                                                                                                                                                 NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version 3.0
SEQ ID NO 10
LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 183; DB 9; Best Local Similarity 100.0%; Pred. No. 2.7e-15; Matches 34; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 183; DB 9; Best Local Similarity 100.0%; Pred. No. 2.7e-15; Matches 34; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 1
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10, Application US/09796202 Patent No. US20020068813A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Olson, William C
APPLICANT: Maddon, Paul J
TITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1
TITLE OF INVENTION: Infection
FILE REFERENCE: 61009
CURRENT APPLICATION NUMBER: US/09/493,346
CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                            APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 equence 1, Application US/09493346 bblication No. US20030082185A1 ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                     09-796-202-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                  FEATURE:
                                                                                                                                                   ORGANISM: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 36
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100.0%;
 Score
Pred.
183; DB 10;
No. 2.7e-15;
                                                                                                                                                                                                                                                                                                                           FOR HIV-1 INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 36;
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                   Length 36;
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В
                                  Qγ
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US-09-834-628-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Human immunodeficiency virus type 1
US-09-779-451-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
US-09-779-451-5
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                                                                                                                                                 US-09-834-628-1
                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.0 SEQ ID NO 5
                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: YU, YEON GYU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Application US Patent No. US20020094521A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09834628 Patent No. US20020119922A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PEEPIIDES FOR INHIBITION OF HIV INFECTION
FILE REFERENCE: 05823.0198-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Wild, Carl T.
APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
APPLICANT: NIVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE OF INVENTION 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                             LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENGTH: 36
                                                                     Match 100.0%;
Local Similarity 100.0%;
les 34; Conservative (
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nes 34; Conserv
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                 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                     Score 183; DB 10;
Pred. No. 2.7e-15;
); Mismatches 0;
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Pred. No. 2.7e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                            DB 10;
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RESULT 7
US-09-854-816-1
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                                                                                                                                                                 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                      1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                                                                                                                                                                                3 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Wilpatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: Linear MOLECULE TYPE: DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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NUMBER OF SEQUENCES:
                                                                                                                                                  APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 650/952-9881
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Genentech, Inc
                                                                                                                                                                                                      Application US/09854816
                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                   INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INVENTION: Constrained Helical Peptides and Methods of
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                                                                                                                                              Andrew C. Braisted
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Melissa A. Starovasnik
                                                                    J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                          J. Kevin Judice
                                                                                                           Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Robert S. McDowell
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Making Same
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TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 176
LENGTH: 37
TYPE: 5-3
                                                                         ; OTHER INFORMATION: DP178c peptide US-09-848-616-176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-854-816-108
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     Matches
                      Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 176, Application US/09848616 Publication No. US20030054010A1
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Best Local Similarity
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APPLICANT: Dunant, Nico.
                                                                                                                      TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                               FEATURE
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   Local Similarity es 34; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
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STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
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 100.0%; ilarity 100.0%; Conservative 0
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Score 183; Db y;
Pred. No. 2.8e-15;
Nismatches 0;
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Pred. No. 2.7e-15;
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1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34

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SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 37

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; SEQ ID NO 4
; LENGTH: 56
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus type
US-09-779-451-4
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                                                                     US-10-040-349B-2
                                                                                       RESULT 12
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           Sequence 2, Application US/10040349B Publication No. US20030082521A1 GENERAL INFORMATION:
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Best Local Similarity
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PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
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CURRENT FILING DATE: 2001-08-17
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CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Allaway, Graham P. TITLE OF INVENTION: Assay for FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
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                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                        NIOR APPLICATION NUMBER: US 60/181,543 PRIOR FILING DATE: 2000-02-10 NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2000-09-28
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SOFTWARE: PatentIn ver
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LENGTH: 46
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                                                                                                                                           18 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 51
                                                                                                                                                                                                                                      Local Similarity
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Brasseur, Robert
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Pred. No. 3.5e-15;
Wismatches 0;
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Pred. No. 4.3e-15;
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Query Match
Best Local Similarity
Thehes 34; Conserv
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; Sequence 81, Application US/10059271
; Publication US20030082208A1
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US-10-059-271-84
                                                                                                                                  RESULT 14
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Best Local Similarity
Matches 34; Conserv
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                                                                  GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 2002-01-31 PRIOR APPLICATION NUMBER: DE 101 06 PRIOR FILING DATE: 2001-02-02 NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEPAN
TITLE OF INVENTION: BEING IMMOBILIZED
TITLE OF INVENTION: BEING IMMOBILIZED
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               APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: REPKE
APPLICANT: BUDDE
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                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 221
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: ALBRE-21
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: Peptide
LOCATION: (1)..(1
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                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: OTHER INFORMATION:
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El Habib, Raphaelle
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                                                                                                                                                                                                                                                                                                                                     Description peptide
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Pred. No. 1
                                                                                                                                                                                                                                                            Score 183; Ub .,
No. 1.8e-14;
                                                                                                                                                                                                                                                                                                                                                     of Artificial Sequence:
                                                                                                                                                                                                                                                       Mismatches
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l.4e-14;
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FILE REFERENCE: ALBRE-22
CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 81
LENGTH: 232
TYPE: PRT
ORGANISM: Artificial Sequence
FEARURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: peptide
US-10-059-271-81
                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/059/271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DB 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 82
LENGTH: 254
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
US-10-059-271-82
; Sequence 82, Application US/10059271
; Publication No. US20030082208A1
; GENERAL INFORMATION:
Search completed: May 16, 2003, 12:10:23 Job time : 14.8835 secs
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                                                                                                                                        Query Match
Best Local Similarity
Matches 34; Conserv
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Best Local Similarity 100
Atches 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
FILE REFERENCE: ALBRE-22
                                                                                                                                                                                                                 OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide 10-059-271-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: REPKE, HEINRICH APPLICANT: BUDDE, ECKHARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 SLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
                                                                                                                                            Conservative
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                                                                                                                                                           100.0%;
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Pred. No. 2.1e-14;
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Pred. No. 1.9e-14;
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A;ACCESSION.
A;Molecule type: DNA
A;Residues: 1-855 <SAN>
N;Residues: 1-855 (B:K02007; NID:g328658; PIDN:AAB59882.1;
C;Superfamily: type E retrovirus env polyprotein C;Keywords: AIDS; capsid protein; coat protein; F;1-30/Domain: signal sequence #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X61353; NID:g60188; PIDN:CAA43618.1; PID:g60189 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus type 1 in blood A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; rescription: Distinct populations of HIV-1 in blood and A; Reference number: S21990
A; Accession: S22004
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                                                                                                                                                                                  A;Title: Nucleotide sequence and expression of an AIDS-associated retrovirus (ARV-2). A;Reference number: A04003; MUID:85090453; PMID:2578227 A;Accession: A03976
                                                                                                                                                                                                                                                    Science 227, 484-492,
                                                                                                                                                                                                                                                                                                          A;Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                           env polyprotein precursor - human immunodeficiency virus type 1 (isolate ARV-2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: EMBL:X61353; NID:g60188 C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-292, 'X', 294-357 <STE2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-357 <STE1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; Hacke, submitted to the EMBL Data Library, July 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Genetics:
                                                                                                                                                                                                                                                                                                 C; Accession: A03976
                                                                                                                                                                                                                                                                                                                                                                                        N; Alternate names:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000; Accession: S22004; S70419
                                                                                                                                                                                                                                                                         Sanchez-Pescador, R.; Power, M.D.;
                                                                                                                                                                                                                                                                                                                                                              Species: human immunodeficiency virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           plope protein gp120/gp41 - human immunodeficiency virus type
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86.1%; Pred. No.
in; coat protein; glycoprotein;
#status predicted <SIG>
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Pred. No. 2.1e-13;
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                                                                                                                                                                                                                                                                         P.J.; Steimer,
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                                                                                                                PID: 9328666
                     immunodeficiency; polyprot
                                                                                                                                                                                                                                                                         Stempien, M.M.;
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                                               Matches
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A; Molecule type: DNA
A; Residues: 1-140,'X',142-312,'X',314-357 <STE2>
A; Cross-references: EMBL:x61355; NID:g60179
C; Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                 A;Cross-references: EMBL:X61355; NID:g60179; PIDN:CAA43622.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency virus A;Reference number: S70417; MUID:92144209; PMID:1736940
A;Accession: S70421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             envelope protein gp120/gp41 - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
A;Variety: isolate 27B
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                                                                                                                                                                               A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-357 <STE1>
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A; Accession: S21994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991 A;Description: Distinct populations of HIV-1 in blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Accession: S21994; S70421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Date: 20-Feb-1995 #sequence_revision
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A;Experimental source: patient L
A;Note: submitted to the EMBL Data Library, July 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-357 <ST2>
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A; Title: Distinct populations of human immunodeficiency
A; Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, AIDS Res. Hum. Retroviruses 8, 53-59, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            envelope protein gpl20/gp41 - human immunodeficiency virus type 1 (patient 4L) C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
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                     Query Match
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Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity es 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
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Pred. No. 2.
Score 177; DB 2; Pred. No. 1.3e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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.7e-13;
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                        Length 357
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                                                                                                                                                                                                                                                                                                                                     PID: g60180
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1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF

Conservative

Mismatches

Indels

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Gaps

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                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus type 1 in A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      envelope protein gp120/gp41 - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 28 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000 C;Accession: S21998; S70425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
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C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyprot
F;1-253/Product: coat protein gp120 (fragment) #status predicted <GP1>
F;254-445/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;426-445/Domain: transmembrane #status predicted <TMN>
F;9,23,42,48,78,85,101,107,131,137,143,147,152,155,190,205,353,358,367,379/Binding site:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, P.N.; Gibbs, R.A. Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus type 1 nucleotide sequence diversity A;Reference number: A41621; MUID:92107924; PMID:1763038
A;Accession: A41621.
                                                                                                                                                                                                                                                 A; Residues: 1-222, 'X', 224-358 <STE2>
A; Cross-references: EMBL: X61359; NID
                                                                                                                                                                                                                                                                                                                                                         A; Reference number: $70417; MUID:92144209; A; Accession: $70425
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                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-358 <STE1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Steuler, H.; Storch-Hageniocher, ...
nitted to the EMBL Data Library, July 1991
ecription: Distinct populations of HIV-1 in blood and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Reference number: S21990
Accession: S21998
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polyprotein M - human immunodeficiency virus type 1 (fragment)
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YTSLIYTLIEQSQNQQEKNEQELLELDKWASLWNWF 175
                                                        YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
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                                                                                                             30;
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                                                                                                             Conservative
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83.3%;
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                                                                                                                                   Score 176;
Pred. No. 1
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1.7e-13;
hes 1;
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..7e-13
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RESULT 14
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A;Molecule type: DNA
A;Residues: 1-854 <OBR>
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C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
                                                                                                                                                                    C; Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                     A;Title: HIV-1 tropism for mononuclear phagocytes can be A;Reference number: S13288; MUID:91043044; PMID:2172833 A;Accession: S13288
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C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999
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636 YTSLIHSLIEESONOOEKNEOELLELDKWASLWNWF
                                                                                 Local Similarity es 30; Conserv
                    1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
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Pred No. 6.1e-13;
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Pfam; PF00517; GP41;
AIDS; Coat protein; Po
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                                                        PIR; A24774; VCLJ3W.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                  Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D., Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Parks E.S., and characterization of conserved regions in the envelope gene of HTLV-III/LAV, the
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999 (Rel. 38, Last annotation update)
999 (Ref. 38, Last annotation update)
polyprotein GP160 precursor [Contains: E
polyprotein GP160]; Transmembrane glycoprotein
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GN Human immunodeficie
OC Viruses; Retroid vo.
OX NCBI_TaxID=11690;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=90317906; E
RA YORK-Higgins D., Cl
RT "Human immunodefici
RT replication, and cy
the viral genome.";
RI J. Virol. 64:4016-4
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01-FEB-1991 (Rel. 17, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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                                                                                                                                                                                                                                                                                                          human immunodeficiency virus type 1 (SF33 isolate) (HIV-1).
iruses; Retroid viruses; Retroviridae; Lentivirus.
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  RESULT 6
ENV_HV1Z2
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01-OCT-1989
16-OCT-2001
                                                          CARBOHYD
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SIGNAL
                                                                                                                                                                                                                                                                                               Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                           use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
Theodore T., Buckler-White A.;
Submitted (NOV-1988) to the HIV data bank.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENV_HV1Z2
                                                                                                                                                                                                                                                                                                                                                       EMBL; M22639; AAA45370.1; -. HIV; M22639; ENV$Z2Z6.
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                                                                                                                                                                                                                                                                                               PF00516; GP120; PF00517; GP41; 1
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31; Conservative
                                                                                                                                                                                                                                                                                                                           IPR000328; Env_GP41.
IPR000777; GP120.
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                                                                                                                                                                                                                                                                                  protein;
    AA;
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BY SIMILARITY.

EXTERIOR MEMBRANE GLYCOPROTEIN.

BY SIMILARITY.

BY GLCNAC. .) (POTE

N-LINKED (GLCNAC. .) (POTE
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3; Mismatches
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CARBOHYD
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No. 1.1e-13;
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                  847;
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Gaps
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Human immunodeficiency virus type 1 (22/CDC-Z34 isolate)
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11683; s SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the EW European Bioinformatics Institute. There are no restr 189 (Rel. 12, Createu)
189 (Rel. 12, Last sequence update)
189 (Rel. 40, Last annotation update)
189 (Rel. 40, Last annotation update)
189 (Rel. 12, Createu)
199 (Rel. 12, Createu)
19 There are no restrictions ong as its content is in Usage Exterior n (GP41)]. уd and EMBL outstation membrane Ø for collaboration

GLYCOPROTEIN

(POTENTIAL).
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ENV_HV126
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Best Local S
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13-AUG-1987 (Rel. (
13-AUG-1987 (Rel. (
13-JUL-1999 (Rel. )
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MEDLINE-87248097; PubMed-3036660;
MEDLINE-87248097; PubMed-3036660;
Srinivasan A., Anand R., York D., Ranganathan Schochetman G., Curran J., Kalyanaraman.V.S., Sanchez-Pescador R.;
HIV; K03458; ENV$Z6.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
                                                                                                                                       modified
                                                                                                                                                  use
                                                                                                                                                                 the
                                                                                                                                                                                            This
                                                                                                                                                                                                                   "Molecular characterization of human immunodeficiency virus zaire: nucleotide sequence analysis identifies conserved and domains in the envelope gene.";
Gene 52:71-82(1987).
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Viruses; Retroid virus
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                                                     C; K03458; V; D26192; V; K03458; E
                                                                                                                    s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way ified and this statement is not removed. Usage by and for commercial titles requires a license agreement (See http://www.isb-sib.ch/announce/
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31; Conservative
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tein (GP120);
                                                                                                           equires a license agreement (See http://www.isb-sib.ch/announce/
email to license@isb-sib.ch).
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GP160 precursor [Contains:
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86.1%;
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                                                                                                                                                                                                                                                                                                                                                                    rus type 1 (Zaire
Retroviridae; Ler
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Pred. No. 1.1e
3; Mismatches
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Lentivirus.
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Luciw P.A.,
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ENV_HV1SC
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Best Local S
Matches 31
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P05878;
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Signal.
SIGNAL
CHAIN
                                    Human immunodeficiency
Viruses; Retroid viruse
NCBI_TaxID=11702;
                                                                                        01-NOV-1988 (Rel. 09, Created)
01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: glycoprotein (GP120); Transmembrane glycoprotein
                                                                                 ENV
SEQUENCE FROM N.A MEDLINE=88219542;
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158
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                                                     viruses;
PubMed=3369091;
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86.1%;
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                                                    Retroviridae; Lentivirus
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TRANSMEMBRANE
BY SIMILARITY
BY GILCUM
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3; Mismatches
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                                                                isolate) (HIV-1)
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.1e-13;
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                                                                                                        Exterior
                                                                                                                                                                                                                                                                                                                       Length
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Farrell K., Wong-Staal F., Gallo R.C.,
"Envelope sequences of two new United
Virology 164:531-536(1988).
-!- MISCELLANEOUS: THE SC ISOLATE WAS
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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PIR; B28922; VCLJSC.
HIV; M17450; ENV$SC.
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.C., Reitz M.
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
glycoprotein (GP120); Transmembrane glycoprotein
ENV.
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MEDLINE-85090453; PubMed-2578227;

Sanchez-Pescador R., Power M.D., Barr
Stempien M.M., Brown-Shimer S.L., Gee
Levy J.A., Dina D., Luciw P.A.;
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Viruses; Retroid viruse
NCBI_TaxID=11685;
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     Polyprotein; Glycoprotein; Transmembrane;
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es; Retroviridae; Lentivirus.
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EMBL; A07108; CAA00616.1; -.
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Alizon M., Wain-Hobson S., Montagnier L., Sonigo P.
"Genetic variability of the AIDS virus: nucleotide
of two isolates from African patients.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM
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Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R., Markham P.D. Salahuddin S.Z., Wong-Staal F., Gallo R.C., Parks E.S., Parks "Genetic variation in HTLV-III/LAV over time in patients with at risk for AIDS.";
Science 232:1548-1553(1986).
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N-LINKED (GLCNAC.
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No. 3
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(GLCNAC
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(GLCNAC.
(GLCNAC.
(GLCNAC.
     update)
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                                                                                                                                                                                                                                                                 Length 847;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.

MEDLINE-85111123; PubMed-2578615;

Ratner L., Haseltine W., Patarca R., Livak

Josephs S.F., Doran E.R., Rafalski J.A., WI

Baumeister K., Ivanoff L., Petteway S.R. J.

Lautenberger J.A., Papas T.S., Ghrayeb J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Envelope polyprotein (
glycoprotein (GP120);
ENV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1 (BH8 Viruses; Retroid viruses; Retroviridae; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00516; GP120; Pfam; PF00517; GP41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlycoSuiteDB; P04582;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wong-Staal F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viruses; Retroid
NCBI_TaxID=11684;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    K02011; ENV$BH8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    K02011; AAA44661.1; -.
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IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein;
 552010680
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TRANSMEMBRANE GLYCO
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Livak K.J., Starcich B
J.A., Whitehorn E.A.,
S.R. Jr., Pearson M.L.,
yeb J., Chang N.T., Gall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AIDS
(GLCNAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 isolate) (HIV-1).
Lentivirus.
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RESULT
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Best Local :
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21-JUL-1986
15-JUL-1999
                                                                                                                                                                                                                                                                                                           This SWI
                                                                                                                             Pfam;
AIDS;
                                                                                                                                                                                                                                          use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update
Envelope polyprotein Gp160 precursor (Conta
glycoprotein (GP120); Transmembrane glycopr
                                                                                                    Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENV_HV1B1 P03375;
                                                                                                                                                       Pfam;
                                                                                                                                                                                           PIR; A03973; VCLJH3.
HIV; M15654; ENV$BH102.
                                                                                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                potential glycosylation sites of the type 1 recombinant human immunodeficiency virus envelope glycoprotein (gpl20) expressed in Chinese hamster ovary cells.";
J. Biol. Chem. 265:10373-10382(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                Gregory T.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich B.R., Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A., Baumeister K., Ivanoff L., Petteway S.R. Jr., Pearson M.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus type 1 (BH10 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus.
                                                                                                                                                                  InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                               the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=90285159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFIDE BONDS, AND CARBOHYDRATE-LINKAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wong-Staal F ;
"Complete nucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE=85111123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=11678;
                                                                                                                                                                                                                                                                                                                                                                                                    "Assignment of intrachain disulfide bonds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lautenberger J.A., Papas T.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                             eonard C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     633 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
                                                                                                                                                                                                                                                                                 SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBE outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
                                                                                                                                        PF00516; GP120; PF00517; GP41;
                                                                                                                                                                                                                    M15654; AAA44205.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               313:277-284(1985)
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                                                                                                                                                                                                                                                                                                                                                                                                                           0285159; PubMed=2355006;
.K., Spellman M.W., Riddle L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        745
811
851 AA;
                                                                                                                             protein;
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83.3%;
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GP160 precursor [Contains: I
Transmembrane glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
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Pred. No. 3.4e-13;
                                                                          TRANSMEMBRANE GLYCOPROTEIN.
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-LINKED (GLCNAC. . .) (P
D16A3C90857785F1 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AIDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J.
                                                                                                                                                                                                                                                                                                                                                                                                                            Harris R.J.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       SITES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           virus, HTLV-III.";
                                                                                                                                                                                                                                                                                                                                                                                                  and characterization of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chang
                                                                                                                             Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 851;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ν.Τ.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .) (POTENTIAL)
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RESULT
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Best Local S
Matches 30
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DISULFID
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CARBOHYD
                                                                                                                              ENV_HV1H2 STANDARD; PRT; 856 AA. P04578; 009779; 13-AUG-1987 (Rel. 05, Created) 15-JUL-1999 (Rel. 38, Last sequence update) 30-MAY-2000 (Rel. 39, Last annotation update) Envelope polyprotein GP160 precursor [Contains: Eglycoprotein (GP120); Transmembrane glycoprotein
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CARBOHYD
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CARBOHYD
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CARBOHYD
            Ratner L., Fisher A., Jagodzinski L.L., Mitsuya H., Liou Gallo R.C., Wong-Staal F.; Submitted (APR-1997) to the EMBL/GenBank/DDBJ databases.
                                               AIDS
                                                                                                   Human immunodeficiency virus type 1 (HXB2 isolate) (HIV-1).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID-11706;
                                                                 Gallo R.C
                                                                               SEQUENCE FROM N.A. MEDLINE=87299196; PubMed=3040055;
                                                      virus
                                                       "Complete
                                                                         Ratner L., Fisher A.,
                                                                                                                                                                                                                                                                 SEQUENCE
                                 REVISIONS
                                                                                                                                                                                                           638
                                               Res.
                                                                                                                                                                                                           YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                        YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
                                                                                                                                                                                                                                     Similarity 30; Conser
                                               Hum.
                                                            nucleotide
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                                                                risner A., Jagodzinski
Wong-Staal F.;
                                                                                                                                                                                                                                                                       816
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295
301
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999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains: E
tein (GP120); Transmembrane glycoprotein
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

sp_unclassified:*
sp_rvirus:*
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SUMMARIES

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ALIGNMENTS

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EMBL; AF16553; AAF08498.1; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
RCBI_TaxID=11676;
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01-MAY-1999 (TrEMBLrel. 10,
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NCBI_TaxID=11676;
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"Surveillance of Central African Nationals living in the "Surveillance of Central African Nationals living in the reveals multiple subtypes of HIV-1 Group M and Group O.";
Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF096339, AAD04414.1;
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Machado E., de Sa C.A.M., Eyer W.,
Calazans A.R., Tanuri A.;
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Viruses; Retroid viruses; Retroviridae;
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torck C., Schable C.A., Wise I
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M., Eyer W., Passioni L.F.C., Meneze
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Q9YXP1;
Q1-MAY-1999 (TrEMBLrel. 10, Created)
Q1-MAY-1999 (TrEMBLrel. 10, Last sequence update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Q1-DEC-2001 (TremBLrel inmunodominant region (Fragment).
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Viruses; Retroid viruses; Retroviridae; Lentivirus
NCBI_TaxID=11676;
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                                                                 NON_TER
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MEDLINE=20134570; PubMed=10669328;

Weidle P-J., Ganea C.E., Irwin K.L., Pieniazek D., McGowan J.P.,

Weidle P.J., Ganea C.E., Irwin K.L., Pieniazek D., McGowan J.P.,

Olivo N., Ramos A., Schable C., Lal R.B., Holmberg S.D., Ernst J.A.;

Olivo N., Ramos A., Schable C., Lal R.B., Holmberg S.D., Ernst J.A.;

"presence of human immunodeficiency virus (HIV) type 1, group M, non-B

subtypes, Bronx, New York: a sentinel site for monitoring HIV genetic

diversity in the United States.";

J. Infect. Dis. 181:470-475(2000).

EMBL, AF199049; AAG02311.1;

InterPro; IPR000328; Env_GP41.
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Viruses; Retroid viruses; Retroviridae;
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             Score 193; DB 15;
Pred. No. 6.1e-16;
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01-DEC-2001
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041560;
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                                                                                                                                                                                                                                                              MEDITINE-98103094; runner-73-007, MEDITINE-98103094; runner-73-007, Connor R.I., Korber B.T., Graham B.S., Hahn B.H., Ho D.D., Walker B.D., Neumann A.U., Vermund S.H., Mestecky J., Jackson S. Fenamore E., Cao Y., Gao F., Kalams S., Kunstman K.J., McDonald McWilliams N., Trkola A., Moore J.P., Wollinsky S.M.; Trkola A., Wollinsky S.M.; Trkola A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Envelope glycoprotein (Fragment). ENV.
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MEDLINE=99372987; PubMeu-
   Pfam; PF00516; GP120; Pfam; PF00517; GP41; Coat protein; G
                                                                                             recombinant gpl20 subunit vacc J Virol. 72:1552-1576(1998).
EMBL; U84817; AAC58848-1; .
InterPro; IPRO00328; Env_GP41.
InterPro; IPRO00777; Gpl20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=11676;
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01-DEC-2001
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(TrEMBLrel. 05, Last sequence up
(TrEMBLrel. 19, Last annotation
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biffier C., Giraud A.,
      Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96.5%;
94.4%;
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                                                                                                                                                                                                                                      vaccines.
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Pred. No. 4.3e-15;
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Q69898;
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01-DEC-2001 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
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                 and D infections in Uganda." Submitted (SEP-2000) to the EMBL; AF307734; AAL08795.1;
                                                Hu D.J., Baggs J., Downing R.G., Pieniazek D., Biryahwaho B., Sempala S.D.K., Rayfield M.A., I "Similar distribution and continued predominano"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gp41 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1996
01-DEC-2001
                                                                                 STRAIN-UG;
                                                                                                                            Human immunodeficiency
Viruses: Retroid virus
                                                                                                                                                            Envelope
                                                                                                                                                                                                      Q90DJ7;
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EMBL: U6728; AAA19141.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
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InterPro; IPR000328; Env_GP41
Pfam; PF00517; GP41; 1.
                                                                                             SEQUENCE FROM N.A.
                                                                                                                 NCBI_TaxID=11676;
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6 (TrEMBLrel.
1 (TrEMBLrel.
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6358 MW;
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91.7%;
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94.4%;
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20,
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Pred. No. 4.4e
3; Mismatches
                              EMBL/GenBank/DDBJ
                                                                                                                                                                      Last annotation
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Last annotation updat
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Pred. No. 3.3e-16;
1; Mismatches 1
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                                                           , Dorn J.,
Dondero T
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                                                  of HIV-1 subtypes
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RESULT 11
Q9IJRO
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Q9YXR1
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01-MAY-1999 (TrEMBLrel. 10, C.
01-MAY-1999 (TrEMBLrel. 10, L.
01-DEC-2001 (TrEMBLrel. 19, L.
Envelope glycoprotein immunod
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Q9IJRO;
01-OCT-2000
01-OCT-2000
01-DEC-2001
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SEQUENCE
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q9YXR1
                                                                                                                                                                                                                                                                                                                                                                                       "HIV-1 subtypes among blood Submitted (NOV-1997) to the EMBL; AF034042; AAC79294.1;
"Evidence for a high frequency of HIV-1 subtype F infections among heterosexual population in Buenos Aries, Argentina."; AIDS Res. Hum. Retroviruses 16:1007-1014(2000).
                             Masciotra S., Livella
Baggs J., Lal R., Pie
"Evidence for a high
                                                                      STRAIN-ARI
                                                                                 SEQUENCE FROM N.A.
                                                                                                    NCBI_TaxID=11676;
                                                                                                               Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
                                                                                                                                            Envelope glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                Tanuri A., Swanson P.A., Costa L.J., Telles J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. STRAIN-RJ96BRP019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Transmembrane
                                                             MEDLINE=20346416; PubMed=10890362;
                                                                                                                                                                                                                                                                                                                                                            Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                       Rayfield
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35; Conservative
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122 AA;
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122 AA;
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(TrEMBLrel. 15,
(TrEMBLrel. 19,
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                                                   Livellara
                                         ellara B., Belloso
Pieniazek D.;
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122
14743 MW;
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Retroviridae;
                                                                                                                                            (Fragment).
                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                       1;
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, Schable
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les 1;
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ble C.,
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, Pieniazek D.,
                                                   Tanuri A.,
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RESULT 12
Q9IJQ3
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Best Local S
Matches 33
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Best Local :
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01-MAR-2001 (TrEMBLrel. 16, Cr
01-MAR-2001 (TrEMBLrel. 19, Lr
01-DEC-2001 (TrEMBLrel. 19, L
Envelope glycoprotein (Fragme
                                                                                                                                                                                                                                                                           Matches
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NON_TER 122
   Olivo N., "Presence
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SEQUENCE
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Q9IJQ3;
            MEDLINE=20134570; PubMed=10669328;
Weidle P.J., Ganea C.E., Irwin K.L.
Olivo N., Ramos A., Schable C., Lal
                                                                  NCBI_TaxID=11676;
[1]
                                                                                                                                                                           Q9EA89
                                                                                                                                                                                                                                                                                                                                           Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                 Masciotra S., Livellara B., Belloso W., Clara L., Tanuri A., Baggs J., Lal R., Pieniazek D.;
"Evidence for a high frequency of HIV-1 subtype F infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae; NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2000 (TrEMBLrel. 15, 01-OCT-2000 (TrEMBLrel. 15, 01-DEC-2001 (TrEMBLrel. 19,
                                            SEQUENCE FROM N.A. STRAIN=BX774;
                                                                                      Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                    heterosexual population in Buenos Aries, Argentina."; AIDS Res. Hum. Retroviruses 16:1007-1014(2000). EMBL; AF220679; AAF74231.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENV.
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                                                                                                                                                                                                                                 YTGLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 113
                                                                                                                                                                                                                                                                           33; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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   Ramos A., of human
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                                                                                                                                                                                                                                                                                                                     122
122 AA;
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122 AA;
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   immunodeficiency
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91.7%;
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; Pred. No. 1.1e
3; Mismatches
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Last annotation updat
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3; Mismatches
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                                                                                                                                  annotation
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   R.B.,
virus
Pieniazek D., McGowan J.P
R.B., Holmberg S.D., Ernst
virus (HIV) type 1, group /
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                                                                                        Lentivirus
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.1e-15;
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     J.P.,
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RESULT 15
Q90DK9
ID Q90DK
AC Q90DK
DT 01-DE
DT 01-MA
DE ENVel
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OS Human
OC Virus
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Best Local
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01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                   Q90DK9
Q90DK9;
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 SEQUENCE FROM N.A. STRAIN=UG;
                                 Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae; NCBI_TaxID=11676;
                                                                                            01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                          SEQUENCE
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EMBL; AF220699; AAF76818.1; -
InterPro; IPR000328; Env_GP41.
Pfam; PF00517: COA1: 1
                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=20346416; PubMed=10890362;
Masciotra S., Livellara B., Belloso W., Clara L., Tanuri A., Ramos
Baggs J., Lal R., Pieniazek D.;
"Evidence for a high frequency of HIV-1 subtype F infections among
"Evidence for a high frequency of HIV-1 subtype F infections among
heterosexual population in Buenos Aries, Argentina.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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J. Infect. Dis. 181:470-475(2000).
EMBL; AF190963; AAG02325.1;
InterPro; IPR000328; ENV_GP41.
                                                                                 Envelope glycoprotein
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33; Conserv
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122 AA;
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122 AA;
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llarity 91.7%;
Conservative ?
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                                                                                                                                                                                                                                                                                                        14748 MW;
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91.7%;
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Pred. No. 1.9e-15;
3; Mismatches 0;
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Pred. No. 1.4e
2; Mismatches
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1.4e-15;
                                                Lentivirus
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Best Local Similarity
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NON_TER
SEQUENCE
                                                                                                                                                         InterPro; IPR000328; Env_GP41.
Pfam; PF00517; GP41; 1.
                                                                                                                                                                                    Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases. EMBL; AF307722; AAL08783.1; -.
                                                                                                                                                                                                           Hu D.J., Baggs J., Downing R.G., Pieniazek D., Dorn J., Fridlund C., Biryahwaho B., Sempala S.D.K., Rayfield M.A., Dondero T.J., Lal R.; "Similar distribution and continued predominance of HIV-1 subtypes A and D infections in Uganda.";
                                                                                                                                             Transmembrane.
78 YTGIIYNLLEESQNQQEKNEQELLALDKWASLWNWF 113
            1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                    34;
                                                                                                      1 .
122
122 AA;
                                                    Conservative
                                                                                                      1
122
; 14675 MW;
                                                               94.5%;
                                                   1.
                                                               Score 189; DB 15;
Pred. No. 1.9e-15;
                                                                                                      2FFD0A7868F3BB37
                                                    Mismatches
                                                                          15;
                                                                                                      CRC64;
                                                                            Length
                                                    Indels
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Search completed: May 16, 2003, 11:19:44
Job time: 27.3124 secs

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Run on:
                                                                                                               OM protein - protein search, using sw model
May 16, 2003, 11:03:40; Search time 10.1928 Seconds (without alignments) 103.919 Million cell updates/sec
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Title: Perfect score: US-09-623-533A-4 200

YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

I number of hits satisfying chosen parameters:

Minimum DB seg length: 0
Maximum DB seg length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	υī	4	ω	2	سو	Result No.
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36	36	36	268	267	233	138	887	865	269	138	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	Length [
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ALIGNMENTS

Query Match 100.0%; Score 200; DB 1; Best Local Similarity 100.0%; Pred. No. 1.8e-18; Matches 36; Conservative 0; Mismatches 0;	; STRANDEDNESS: single ; TOPOLOGY: unknown ; MOLECULE TYPE: peptide US-08-073-028-4	; LENGTH: 36 amino acids ; TYPE: amino acid·	; INFORMATION FOR SEQ ID NO: 4: SEQUENCE CHARACTERISTICS:	; TELEFAX: (212) 869-8864/9741 ; TELEX: 66141 PENNIE	; TELECOMMUNICATION INFORMATION: ; TELEPHONE: (212) 790-9090	; REFERENCE/DOCKET NUMBER: 7872-004-999	; NAME: Coruzzi, Laura A.	; ATTORNEY/AGENT INFORMATION:	; CLASSIFICATION: 514	; APPLICATION NUMBER: US/08/073,028	; SOFTWARE: PatentIn Release #1.0, Version #1.25	COMPUTER: IBM PC compatible	; MEDIUM TYPE: Floppy disk	; COMPUTER READABLE FORM:	; ZIP: 10036	Υ.:	; STATE: New York	 ; STREET: 1155 Avenue of the Americas	; CORRESPONDENCE ADDRESS:	; NUMBER OF SEQUENCES: 74	OF INVENTION: TRANSMISSION	3	Wild, Carl T.	Matthews Thomas	: APPLICANT: Bolognesi Dani D	FACTIC NO. 3404933	; Sequence 4, Application US/08073028	US-08-073-028-4	RESULT 1
; Length 36; 8; 0; Indels											. 25										1	ORS OF HIV							
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                                                                                                                                                                                                                                        Sequence 4, Application Patent No. 6017536
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ZIP: 1036-2/11
ZIP: 1036-2/11
COMPUTER REALABLE FORM:
COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TY
                                                                                                                                                                                                            GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TOPOLOGY: unk
MOLECULE TYPE:
                                                                                                                                         APPLICANT:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                         APPLICANT:
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TITLE OF INVENTION:
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nes 36; Conserv
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REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: New York
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                                                                                                                                                                                                                                                                               Application US/08360107A
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Petteway, Stephen R.
Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (212) 869-9741/8864
                                      Barney, Shawn O.
Lambert, Dennis M.
                                                                                                         Bolognesi, Dani P. Matthews, Thomas J. Wild, Carl T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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Petteway,
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   Stephen R
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Pred. No. 1.8e-18;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
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TITLE OF INVENTION:
                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                            TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                    STATE: New York
                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.0%; 100.0%; 100.0%; 100.0%; 100.0%
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                            COUNTRY: USA
ZIP: 10036-2711
                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS
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Matthews, Thomas J.
Wild, Carl T.
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Langlois, Alphonse
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                                                                                                                                           Pennie &
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N: 435
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                                                                                                                                                                                                            COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
                                                                                                                                                                                            TRANSMISSION
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                                                                                                                                           Edmonds LLP
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Pred. No. 1.8e-18;
); Mismatches 0;
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RESULT 5
US-08-919-597-4
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Best Local Similarity
Matches 36; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Langlois, TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION:
             REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
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TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 06-JUN-1995
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                                                      NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                OPERATING SYSTEM:
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                                                                                                                                                                                                                                                    COMPUTER:
                                                                                                                                                                                                                                                                                                                               CITY: New York
STATE: New York
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                                                                                                                                                         CLASSIFICATION:
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Langlois, Alphonse J.
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Lambert, Dennis M.
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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869-9741/8864
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Pred. No. 1.8e-18;
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US-08-475-668A-4
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Best Local Similarity
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                                                                                                                                TOPOLOGY: unknown MOLECULE TYPE: peptide
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SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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NAME: CORUZZÍ, Laura A.
REGISTRATION NUMBER: 30,
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10036-2711
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Lambert, Dennis M.
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COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING INF
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Pred. No. 1.8e-18;
                                                       Score 200; DB 3;
Pred. No. 1.8e-18;
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
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CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE
TITLE OF INVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING EPSTEIN-BARR VIRUS
TITLE OF INVENTION: TRANSMISSION
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TOPOLOGY: un
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                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
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                                                                                                                                                                                                                                                                                                                    1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                     1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
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                                                                                                                                                                                                        , Application US/08471913A 6093794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino acid
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Matthews, Thomas J.
                                                                                                                             Matthews, Thomas J. Wild, Carl T.
                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                         Lambert, Dennis M.
                                                                                                              Barney, Shawn O.
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METHODS FOR INHIBITION OF MEMBRANE
FUSION-ASSOCIATED EVENTS, INCLUDING INFLUENZA VIRUS
                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 200; DB 3; 100.0%; Pred. No. 1.8e-18; ... Mismatches 0;
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; MOLECULE TYPE: peptide US-08-471-913A-4
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Best Local Similarity
Matches 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/08554616
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APPLICANT:
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MEDIUM TYPE: Floppy disk
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TELECOMMUNICATION INFORMATION:
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CURRENT APPLICATION NUMBER: US
APPLICATION NUMBER: US
                                                                                                                                                   ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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CORRESPONDENCE ADDRESS:
        CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
08/073,028
                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 06-NOV-1995
                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
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                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ZIP: 10036-2711
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                                          CLASSIFICATION:
                                                                                                         SOFTWARE:
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(212) 869-9741/8864
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                                                                                                                                                                                                                                                                                                                                               Wild, Carl T
                                                                                                         PatentIn Release #1.0, Version #1.25
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07-JUN-1993
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RESULT 10
US-08-485-264A-4
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                                                                                           TELEFAX: (212) 869-974
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                  PC-DOS/MS-DOS
CURENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,264*
FILING DATE: 07-JUN-1^^
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Petteway, Stephen R. APPLICANT: Langlois, Alphonse J. TITLE OF INVENTION: COMPOSITIONS TITLE OF INVENTION: MEMBRANE FUSTITLE OF INVENTION: RESPIRATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: unknown MOLECULE TYPE: peptide
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LENGTH: 36 amino acids
                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
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CITY: New York
Now Yorl
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 OLECULE TYPE:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                            STRANDEDNESS:
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ZIP: 10036-2711
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Coruzzi, Laura A.
78
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                                             : 36 amino acids amino acid
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Coruzzi, Laura A.
Coruzzi, Sarra A.
79
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(212) 869-9741/8864
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peptide
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Pred. No. 1.8e-18;
; Mismatches 0;
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US-09-082-279B-1358; Sequence 1358, Application US/09082279B; Patent No. 6258782
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US-09-082-279B-1359
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SOFTWARE: FastSEQ for
SEQ ID NO 1358
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SEQ ID NO 1359
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Best Local :
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   Best Local Similarity Matches 36; Conserv
                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 625878
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                              FILE REFERENCE: 7872-043
CURRENT APPLICATION UMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                                                                                                                                                                                                                          APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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ORGANISM: Artificial Sequence
                                                                                OTHER INFORMATION: Core polypeptide
                                                                                                  FEATURE:
                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                 TYPE: PRT
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Merutka, Gene
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100.0%; Score 200; DB 4; ilarity 100.0%; Pred. No. 1.8e-18; Conservative 0; Mismatches 0;
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Pred. No. 1.8e-18;
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US-08-474-349A-4
                                                        Patent No. 6348568
GENERAL INFORMATION:
                                                                                       Sequence 1358, Application US/09315304B
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Patent No. 6333395
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APPLICANT: Barney, S. APPLICANT: Guthrie, K. APPLICANT: Merutka, G. APPLICANT: Anwer, M.
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TOPOLOGY: unl
MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: COTUZZÍ, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-POS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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1155 Avenue of the Americas
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Lambert, Dennis M.
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Matthews, Thomas J.
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Search completed: May 16, Job time: 10.1928 secs

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US-09-315-304B-1359
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SEQ ID NO 1359
LENGTH: 36
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                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 09/082,279 PRIOR FILING DATE: 1998-05-20 NUMBER OF SEQ ID NOS: 1667
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/315,304B CURRENT FILING DATE: 1999-05-20
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TYPE: PRT .
ORGANISM: Artificial Sequence
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US-09-854-816-13

US-09-854-816-28

US-09-854-816-28

US-09-854-816-26

US-09-854-816-26

US-09-854-816-12

US-09-891-609-2

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Sequence 16, Appl	US-	36 9	87.5	175	3
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RESULT 1
US-09-854-816-33
; Sequence 33, Application US/09854816
; Patent No. US20020151473A1
; GENERAL INFORMATION: NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEFAX: 650/922-9881
INFORMATION FOR SEQ ID NO: 33: ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Winpatin (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/854,816

FILING DATE: 15-May-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION DATA:

PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/965, FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION: SEQUENCE CORRESPONDENCE ADDRESS: APPLICANT: Andrew C. CITY: South San FI STATE: California STREET: 1 DNA Way CITY: South San Francisco COUNTRY: USA ADDRESSEE: OF SEQUENCES: CHARACTERISTICS INVENTION: J. Kevin Judice Robert S. McDowell J. Christopher Phelan Melissa A. Starovasnik James Genentech, Inc. A. Wells Making Same Constrained Helical Peptides and Methods Braisted

of.

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                                                                                                                                                                            ; SEQUENCE DESCRIPTION: SEQ ID NO: 50: US-09-854-816-50
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US-09-854-816-50
RESULT 3
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                                                                                                              Best Loc
Matches
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GENERAL INFORMATION:
APPLICANT: Andrew C. Braisted
                                                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 50: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      169 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 204
                                               168
                                                                                                                            Local
                                             1 YTGIIYNLLEESONQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/965,056
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: TOICHIA, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: Linear SEQUENCE DESCRIPTION: SEQ ID NO: 33:
                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
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                                                                                                              l Similarity
32; Conser
                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                             LENGTH: 233 amino acids
TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 269 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94080
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amino Acid
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J. Christopher Phelan
Melissa A. Starovasnik
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                               Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WinPatin (Genentech)
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                                                                                                                              92.5%;
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                                                                                                             Score 185; DB 10;
Pred. No. 1.6e-14;
3; Mismatches 1;
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Pred. No. 3.1e-16;
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                                                                                                                                             Length 233;
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RESULT 4
US-09-854-816-41
; Sequence 41, Application US/09854816
; Patent No. US20020151473A1
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                         168 YTGLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                                                                                                                                                                                                                                                                              1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Timothy E
REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: Linear
SEQUENCE DESCRIPTION: SEQ ID NO:
                    NUMBER OF SEQUENCES: 11 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
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                                                                               TITLE OF
                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                       32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1 DNA Way
CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 650/952-9881
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ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Genentech, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                               INVENTION:
                                                                                                                J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
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Robert S. McDowell
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  Genentech, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                     92.5%;
88.9%;
                                                       Constrained Helical Peptides and Methods Making Same
                                                                                                    Wells
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 185; DB 10;
Pred. No. 1.8e-14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 267;
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RESULT 5
US-09-854-816-43
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168 YTGLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 203
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                   ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatin (Genentech)

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: - CUNKNOWN>
PRIOR APPLICATION DATA:
                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE DESCRIPTION: SEQ ID NO: 41:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: P1005R2 TELECOMMUNICATION INFORMATION:
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                                                             APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                         CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
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STATE: California
        APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                      COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Genentech, Inc.
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Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                1 DNA Way
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                            Making Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 185; DB 10;
Pred. No. 1.8e-14;
3; Mismatches 1
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US-09-854-816-110
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Best Local Similarity
Matches 31; Conserv
    Query Match
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                                                                                                                                                                INFORMATION FOR SEQ ID NO: 110:
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                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                             SEQUENCE
                                                                                                                                            SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Andrew C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE DESCRIPTION: SEQ ID NO: 43:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 269 amino acids
TYPE: Amino Acid
                                                                                                                                                                                                                                                                NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2
                                                   TOPOLOGY: Linear NCE DESCRIPTION: SEQ ID NO: 110:
                                                                                                    TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: South San
                                                                                                                       LENGTH: 46 amino acids
                                                                                                                                                                                   TELEFAX: 650/952-9881
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: Linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robert S. McDowell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
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    91.0%;
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Pred. No. 3.1e-14;
  Score 182;
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DB 10;
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Length 46;
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Matches

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RESULT 8
US-09-654-816-48
; Sequence 48, Application US/09854816
; Patent No. US20020151473A1
; GENERAL INFORMATION:
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Sequence 13, Application US/09854816; Patent No. US20020151473A1
GENERAL INFORMATION:
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Matches 32; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                          11
                                                                                                                                                                                                                                                Local Similarity
les 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
                                  APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 113
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                                                                                                                                                                                                                                                                                                                                                                       TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: 650/225-8674
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                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 268 amino acids
                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INVENTION: Constrained Helical Peptides and Methods of
J. Kevin Judice
Robert S. McDow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
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                                                                                                                                                                                                                                                              91.0%;
88.9%;
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 McDowell
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                                                                                                                                                                                                                                                              Score 182; DB 10;
Pred. No. 4.1e-14;
                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                 Length 268;
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US-09-854-816-67
; Sequence 67, Application U; Patent No. US20020151473A1; GENERAL INFORMATION:
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Best Local Similarity
Matches 31; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 48:
SEQUENCE CHARACTERISTICS:
LENGTH: 269 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               169 YTGIIFNLIEEAQNQQEKNEQDLLELDKWAGLWNWF 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Genente
STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible operating System: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                             TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Andrew C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: Linear SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                            COUNTRY: USA
ZIP: 94080
                                                                                                     CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09854816
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
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                                                                                                                                                                                                                                                                                  J. Christo
Melissa A.
                                                                                                                                                                                                                                                                                                 Robert S. McDowell
J. Christopher Phelan
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James A. Wells
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                                                                                                                                                                                                                                                                  James A. Wells
                                                                                                                                                                                                                                                                                                                                               Kevin Judice
                                                                                                                                                                Genentech,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91.0%;
86.1%;
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                                                                                                                                                                                                                                                                                                                                                                   Braisted
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Pred. No. 4.1e-14;
4; Mismatches 1
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PRIOR APPLICATION DATA:

FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>

CURRENT APPLICATION DATA:

OPERATING SOFTWARE:

SYSTEM: PC-DOS/MS-DOS WinPatin (Genentech)

APPLICATION NUMBER:

US/09/854,816

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APPLICATION NUMBER: 08/965,056
FILING DATE: «Unknown)
ATTORNEY/AGENT INFORMATION:
NAME: TOICHIA, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-6674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
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                                                                                                                                                                                                                 ZIP: 94080

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPathn (Genentech)
SOFTWARE: WATA:
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NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
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                                                                                                                                                                          CLASSIFICATION: <Unknown>
                                                                                                                                                                                         APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 270 amino acids TYPE: Amino Acid
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                                                                                                                                                                                                                                                                                                                                                                                      CITY: South San F. STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Melissa A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            James A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Christopher Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Judice
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                                                                                                                                                                                                                                                                                                                                                                                                          Francisco
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Pred. No. 4.1e-14;
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YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 203

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US-09-854-816-9
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                                                                                                                     US-09-854-816-9
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Best Local Similarity 88.9
Matches 32; Conservative
                                                                                   Query Match
                                                   Matches
                                                                     Best
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INFORMATION FOR SEQ ID NO: 9:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    169 YTSLIYTLLEESQNQQEKNEQELLELDKWASLWNWF 204
                                                                  Local Similarity
1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 268 amino acids
                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
                                                                                                                                    SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
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                                                   31;
                                                                                                                                                                                                                                                                                                        NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
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TYPE: Amino Acid
                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                    TYPE: Amino Acid
                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: P1005R2
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                                                   Conservative
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Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
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                                                                                                                                                       Linear
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88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Francisco
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                                                Score 179; DB 10;
Pred. No. 9.3e-14;
3; Mismatches 2;
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Pred. No. 5
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US-09-854-816-26; Sequence 26, A
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Sequence 12, Application US/09854816
Patent No. US20020151473A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                       RESULT 13
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GENERAL INFORMATION:
APPLICANT: Andrew C. Brainti
                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                        uery Match
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                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
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MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                 NUMBER OF SEQUENCES:
                                                  TITLE OF INVENTION:
                                                                                                                                                    APPLICANT: Andrew C. Braisted
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
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STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 268 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Genentech, Inc.
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                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94080
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Melissa A. Starovasnik
                                                                                            J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
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                                                                                Melissa A.
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                   Making Same : 113
                                                  Constrained Helical Peptides and
                                                                  Wells
                                                                                    Starovasnik
                                                                                                                                                                                                                                                                                                                                                                        Score 179; DB 10;
Pred. No. 9.3e-14;
                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                             26:
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RESULT 15
US-09-891-609-2
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                                                                                                                                                                                                                                                                                      SEQ ID NO 4
LENGTH: 619
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                                                                                                                                                    Query Match
Best Local Similarity
Matches 31; Conserv
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                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 2570-1-002N
CURRENT APPLICATION NUMBER: US/09/891,609
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: 60/214,608
PRIOR FILING DATE: 2000-06-27
                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 4 SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Stamatatos, Leondias
TITLE OF INVENTION: HIV-1 VACCINES AND SCREENING METHODS THEREFOR
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                  ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 204
                                                                         574 YTNLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 609
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                             1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Timothy E.
RECISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
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FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 269 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
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TELEFAX: 650/952-9881
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86.1%;
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Pred. No. 9.3e-14;
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No. 2.2e-13;
                                                                                                                                                        Mismatches
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Minimum DB :
Maximum DB :
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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                                                          Peptide correspond
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HIV-1 9p41 peptide
DP178 homologue de
Virus related pept
HIV antiviral acti
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ALIGNMENTS

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WPI; 1996-309517/31.	Barney SO, Bolognesi DP, Lambert DM, Langlois AJ; Matthews TJ, Petteway SR, Wild CT;	(TRIM-) TRIMERIS INC. (UYDU-) UNIV DUKE.	06-JUN-1995; 95US-0470896. 20-DEC-1994; 94US-0360107.	20-DEC-1995; 95WO-US16733.	27-JUN-1996.	WO9619495-A1.	Human immunodeficiency virus type 1.	influenza virus; hepatitis B virus.	Antifusogenic activity; antiviral capability; coiled-coil peptide; ALLMONTS: 107x178x4: DIJID search motif: wirel transmission: utv.	Peptide corresponding to residues 638-673 of HIV-1(MN) gp41.	17-FEB-1997 (first entry)	AAR98401;	RESULT 1 AAR98401 D AAR98401 standard; peptide; 36 AA.

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                                                                                                                                                                                                                                                                                                                                                                                                          Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent - useful for treatment of HIV infection inhibiting replication or transmission of HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                                                                   AAW17012-W17016 are DP-178 homologues that are useful in the treatment of HIV infection. DP-178 is a peptide corresponding to residues 638-673 of HIV type 1 glycoprotein 41 (gp41) transmembrane protein DP-178 and its derivatives/homologues are used in combination
                                                                                                                                                                                                                                                                                                                                                      Disclosure; Figure 1; 84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JUN-1995;
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                                                                                                             cytokine, glycosylation or viral mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-JUN-1996;
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transmembrane; ancive-
transmission; transmission.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus
                                                                                                                                                                       with a therapeutic agent, e.g a reverse transcriptase, viral
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                                                                                        inhibiting transmission.
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                                                          against HIV infection
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                                                                                  They may also
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Pred. No. 2.9e-17;
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Sequence

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AAU14014 standard;

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                                                                                                                                        The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required for normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HIV-1 gp41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JAN-2002
                                                                                                       Sequence
                                                                                                                                                                                                                                                                                        Disclosure;
                                                                                                                                                                                                                                                                                                                             Heptad repeat region peptide analogs fusion, useful for treating HIV and F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200164013-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus; HIV; respiratory syncytial virus; RSV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAG67042;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             infection;
                                                                                                                                the specification.
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1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                    2001-514829/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunodeficiency virus type 1.
                                                   36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           heptad; DP178.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptide
                                                                                                        36 AA;
                                                                                                                                                                                                                                                                                     Fig 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                             Delmedico
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US03988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat region; transmembrane protein;
                                                                                                                                                                                                                                                                                     587pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DP178 homologue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                 100
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                                                                                                                                                                                                                                                                                                                                                                                             Erickson
                                                   Score 193; DB 22;
Pred. No. 2.9e-17;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 193; DB 18;
Pred. No. 2.9e-17;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA
                                                                                                                                                                                                                                                                                                                             s useful for inhibiting virus/cells Respiratory Syncytial Virus
                                                                                                                                                                                                                                                                                                                                                                                             JB,
                           36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36
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  36
                                                                                                                                                                                                                                                                                                                                                                                              Lambert DM,
                                                      Indels
                                                                             Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gp41; HR1;
                                                                                                                                                                                                                                                                                                                                                                                              Sista
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36;
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RESULT 5
AAB92247
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                                                                                                                                                                                                                                                                                                                                                                                                                                            PAX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        activity. The peptides of the invention (AAU12559-AAU14009) comprise DP178-like and DP107-like peptides. The DP178 peptide corresponds to amino acids 639-673 of the transmembrane protein gp41 from human immunodeficiency virus 1 (HIV-1) isolate LAI. The DP107 peptide corresponds to amino acids 558-595 of gp41 from HIV-1LAI. The invention calso relates to a method of identifying compounds that inhibit the formation of or disrupts a DP107/DP178 complex. The method comprises detecting the formation of a DP107/DP178 complex, both in the presence or absence of a test compound, in a reaction mixture containing DP107 and DP178 peptides. The method is useful for identifying compounds, including small molecule compounds, which may themselves exhibit antifusogenic, antiviral or intracellular modulatory activity. The DP178-like/DP107-like peptides are useful to inhibit human and non-human retroviral, particularly HIV, transmission to uninfected cells. The HIV-1 isolate MV
                                                                                                                                                                                                                                                                                                                                Matches
Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying a compound that inhibits the formation of or disrupts a DP107/DP178 complex, especially compounds with antifusogenic, antiviral or intracellular modulatory activity, by detecting the formation of a DP107/DP178 complex -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anti-retroviral; DP178-like; I antifusogenic; antiviral; HIV
                                                                       Virus related peptide SEQ ID NO:1423.
                                                                                                                                         AAB92247;
                                                                                                                                                                          AAB92247 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to peptides which exhibit anti-retroviral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 1; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-442157/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jeffs P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2000; 2000WO-US35727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-JUL-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-NOV-2001
                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                         1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                     isolate MN
                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lackey JW,
                                                                                                                                                                                                                                                                                                                                                                                                    36 AA;
                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            derived from HIV-1 isolate
                                                                                                                                                                                                                                                                                                                                              100.0%;
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                                                                                                                                                                                                                                                                                                                            Score 193; DB 22;
Pred. No. 2.9e-17;
No. Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transmission.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lawless MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Merutka
                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                36;
                                                                                                                                                                                                                                                                                                                            0;
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RESULT 6
AAB54788
Вþ
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                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active amino acid region (III) and a creactive group (II) (e.g. succinimidy) and maleimido groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptide composed of 3-50 amino acids. (I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half life) and specificity as bonding to large molecules decreases
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                             intracellular uptake and interference with physiological processes AAB90829 to AAB92441 represent peptides which can be used in the exemplification of the present invention.
                                                                                                                                                          05-MAR-2001 (first entry)
                                                                   Long lasting fusion peptide inhibitor; viral infection; antiviral; antifusogenic; mobile blood component; measles virus; MeV; SIV; simian immunodeficiency virus; human parainfluenza virus; HPIV; RSV;
                                                                                                                           HIV antiviral activity exhibiting peptide SEQ ID
                                                                                                                                                                                                                  AAB54788 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modifying and attaching therapeutic peptides peptidase degradation, useful for increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bridon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-MAY-1999;
10-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-MAY-2000; 2000WO-US13576
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                           1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                             YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                     respiratory syncytial virus; human immunodeficiency virus; HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DP,
                                                                                                                                                                                                                                                                                                                                                          36; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                    36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0134406.
99US-0153406.
99US-0159783.
                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    733pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Milner
                                                                                                                                                                                                                       36
                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                     Score 193; DB 22;
Pred. No. 2.9e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PG,
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                                                                                                                                                                                                                                                                                                                                                          Mismatches
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length of i
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                                                                                                                              NO:5
                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              n prevents
in vivo activity
                                                                                                                                                                                                                                                                                                                                                                                       36;
                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                         0;
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Human immunodeficiency virus type 1.

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RESULT 7
AAY22819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RSV, HPIV, MeV, and SIV. (I) may be administered prophylactically to previously uninfected individuals. This is useful in cases where an individual has been subjected to a high risk of exposure to a virus. By bonding of long-lived components of the blood, such as immunoglobin, serum albumin, red blood cells and platelets the activity is extended for days to weeks. This is due to improved stability in vivo and a reduced susceptibility to peptidase or protease degradation. This minimises the need for more frequent, or even continual, administration of the peptides. AAB54784 to AAB55431 represent peptides used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  comprising a peptide that exhibits anti-viral activity and a reactive group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds. (I) has anti-viral and anti-fusogenic activities. (I) inhibits viral infection of cells by inhibiting cell-cell fusion or free virus infection or to reduce the level of membrane fusion events between two or more entities, e.g., virus-cell or cell-cell, relative to the level of membrane fusion that occurs in the absence of the peptide. (I) is useful in the treatment of patients who are suffering from viral infection, e.g. HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A modified peptide and a reactive group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds useful for treatment of viral infections, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 6; Page 174; 211pp; English.
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10-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAY-2000;
                                                                                                     HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement;
                                                                                                                                                                                                                                AAY22819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-NOV-2000
14-MAY-1998
                             WO9820036-A1
                                                          Human immunodeficiency virus
                                                                                                                                                                      SEQ ID NO. 15 from WO9820036.
                                                                                                                                                                                                   19-AUG-1999
                                                                                                                                                                                                                                                                AAY22819 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CONJ-) CONJUCHEM INC
                                                                                        immunoglobulin
                                                                                                                                                                                                                                                                                                                                       1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001-007496/01
                                                                                                                                                                                                                                                                                                                                                                                                      ch 100.0%;
1 Similarity 100.0%;
36; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dufresne RP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36 AA;
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                                                                                                                                                                                                 (first entry)
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99US-0153406
                                                                                        purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Boudjellab N,
                                                                                                                                                                                                                                                                267
                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                     Score 193; DB 22; Pred. No. 2.9e-17;
                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a modified anti-viral peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robitaille M,
                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                     36;
                                                                                                                                                                                                                                                                                                                                                                                                      0;
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                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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              07-AUG-2001
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RESULT 8
ABG68290
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 11; Page 155; 279pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1998-286866/25
                                                          HIV; glycoprotein; gp41; antigen; helical conformation;
virus-induced membrane fusion; acquired immunodeficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Braisted A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-NOV-1997;
Human immunodeficiency virus type 1 clade
                                       viral envelope protein;
                                                                                                                       Envelope protein
                                                                                                                                                               07-OCT-2002
                                                                                                                                                                                                       ABG68290;
                                                                                                                                                                                                                                             ABG68290 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    forms of
                                                                                                                                                                                                                                                                                                                                              167 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                      1
                                                                                                                                                                                                                                                                                                                                                                                    YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                              36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "floppy" peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            267 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Judice JK,
                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-0876698
96US-0743698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97WO-US20069
                                                                                                                     gp41 from HIV clade B strain
                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                       vaccine; virucide; anti-HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                               267
                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 193; DB 19; Pred. No. 2.7e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phelan JC,
                                                                                                                                                                                                                                                                                                                                                202
                                                                                                                                                                                                                                                                                                                                                                                      36
                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                            #9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Starovasnik MA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        267;
                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PF PT PT PS XXX
 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein) protein of human immunodeficiency virus (HIV). The cyclic competides have formulas given in the specification part of which are code derived from a consensus sequence of gp41 derived from HIV clades A, B, CC C, D, E or O. The peptides are used to cause induction of a specific commune response, resulting in antibodies that prevent virus-induced commune fusion. The peptides are used to treat subjects with, or at risk cof, HIV infection, either as antibudies that prevent virus-induced cof, HIV infection, either as antibudies and immunogen (including as correction/treatment of HIV infection (i.e. acquired immunogen (including as correction/treatment of HIV infection (i.e. acquired immunogen immunogen correction/treatment of HIV infection of mother-to-child transmission or in coases of health care accidents. The peptides can be based on specific HIV crass of health care accidents. The peptides can be based on specific HIV crass in the present sequence is gp41 protein from a particular correction. The present sequence is gp41 protein from a particular correction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                   JLT 9
20-AUG-1991;
16-AUG-1993;
09-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-JUN-1997;
06-NOV-1996;
16-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New cyclic peptides from human immune deficiency virus gp41, treatment or prevention of HIV infection, are constrained to alpha-helical conformation \,\cdot\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to cyclic peptides (A) with a constrained helical conformation, derived from gp41 (glycoprotein 41, a viral envelope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-487624/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Braisted AC, Wells JA;
                                                           11-MAY-1995;
                                                                                         09-DEC-1997
                                                                                                                                                  Human immunodeficiency virus type
                                                                                                                                                                                               gp120 protein;
                                                                                                                                                                                                                           HIV-1 gp120 protein fragment
                                                                                                                                                                                                                                                           11-SEP-1998
                                                                                                                                                                                                                                                                                       AAW43068
                                                                                                                                                                                                                                                                                                                     AAW43068 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-NOV-1997;
                                                                                                                                                                               gp120 protein; purification; fractionation; ion
binding affinity; CD4; hydrophobic interaction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                               167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                          1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                               YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                           36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      267 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Column 151-152; 175pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97US-049787P.
96US-0743698.
97US-0876698.
91US-0684963.
93US-0109002.
94US-0240073.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to derive a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0965056
                                                           95US-0439286
                                                                                                                                                                                                                                                                                                                   peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  consensus sequence of
                                                                                                                                                                                                                                                                                                                     854
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                           fractionation; ion exchange; chromatography;
                                                                                                                                                                                                                             from isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 193;
Pred. No. 2.
                                                                                                                                                                                                                                                                                                                     A
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phelan JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 23;
1.7e-16;
2s 0;
                                                                                                                                                                                                                             MN
                                                                                                                                                                                size exclusion; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gp41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Starovasník
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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have
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MA
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RESULT 10
AAR14903
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                                                                                                                                                                                                                                                                                                             XXX
XX
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW43066-W43080 are fragments of the gpl20 protein from different human climburodeficiency virus type I (HIV-1) isolates. These proteins are used in a novel method for purifying HIV gpl20 so as to provide a purified gpl20 glycopeptide having protein/protein binding properties substantially identical to natural viral HIV gpl20. The method involves fractionating a crude gpl20 preparation containing full-length, cc glycosylated gpl20 using ion exchange chromatography so as to provide a first collection of fractions. An afraction from the first collection is selected that exhibits specific binding affinity for CD4 peptide, cc thereby producing a first fractionated material. The first fractionated material is fractionated by hydrophobic interaction chromatography so as to provide a second collection of fractions from which a second collection of fractions from which a second collection is selected that exhibits specific binding affinity for CD4 peptide. This second fraction is fractionated by size exclusion cc chromatography so as to provide a third collection of fractions considered specific binding affinity for CD4 peptide. The purified gpl20. The purified gpl20 can be used for antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
          WPI; 1991-346752/47.
N-PSDB; AAQ14751.
                                                                                                                                                                                                                                                                                                                                            HIV-1(MN)
                                                                                                                                                                                                                                                                                                                                                                           17-DEC-2001
05-FEB-1992
                                                                                                                                                                                                                             USN7599491-N.
                                                                                                                                                                                                                                                            Human immunodeficiency virus-1 (MN)
                                                                                                                                                                                                                                                                                           envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                               AAR14903;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR14903 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Purification of HIV gp120 - using chromatographic methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAY-1995;
                                                             Reitz M;
                                                                                                                                                             17-0CT-1990;
                                                                                                                                                                                            15-OCT-1991.
                                                                                                                                                                                                                                                                                                          human immunodeficiency virus; United
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            production and in vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-041353/04
                                                                                          (USSH ) NAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             637 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l Similarity
36; Conserv
                                                                                                                                                                                                                                                                                                                                            env
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             854 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fig
                                                                                              INST OF HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                           (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                           protein.
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                                                                                                                             90US-0599491
                                                                                                                                                            90US-0183830
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       53pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 193; DB 19;
Pred. No. 9.9e-16;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ΑA
                                                                                                                                                                                                                                                                                                             States; MN isolate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
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RESULT 11
AAR79173
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The permuted circular unintegrated viral DNA representing the complete HIV-1(MN) genome was cloned into the EcoRI site of lambda gtWES.lambda B DNA from total DNA of H9 cells producing HIV-1 (MN). This clone was designated lambda MN-PH1; it was subcloned in Ml3mp18 and Ml3mp19 and the DNA sequence of the entire clone was obtained the amino acid sequence of the env protein was deduced from it. (Note: Revised entry submitted to correct the patent number format of US Government-owned NTIS applications to prevent clashes with ongoing US granted patent numbers. For further information please visit the Derwent
Peptide analogues useful as therapeutic agents, diagnosis of disease - maintain conformation o e.g. HIV gpl20 peptide.
                                                                         WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HIV virus-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV virus-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-MAR-1996
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                                                                                                                                                                                                        19-JAN-1994;
                                                                                                                                                                                                                                          19-JAN-1995;
                                                                                                                                                                                                                                                                              27-JUL-1995.
                                                                                                                                                                                                                                                                                                                WO9520162-A1
                                                                                                                                                                                                                                                                                                                                                                     Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   web site.at www.derwent.com/dwpi/updates/ntis_us.html.)
                                                                                                               Harris-Kelson TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
                                                                                                                                                                                                                                                                                                                                                                                                     Region
                                                                                                                                                                                                                                                                                                                                                                                                                                         Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   639 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV-1 isolates MN-ST1 and BA-L, ENV protein and DNA -eful in therapeutics, vaccines and diagnostic tests
                                                                           1995-269543/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                               Sn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fig
                                                                                                                                             SEC DEPT HEALTH.
DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             856 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gp120;
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                                                                                                                                                                                                        94US-0184330
                                                                                                                                                                                                                                          95WO-US00760
                                                                                                                                                                                                                                                                                                                                                                                                     /note= "0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "HIV-1 isolate MN gp120 301..400
                                                                                                                                                                                                                                                                                                                                                                     824..830
                                                                                                                                                                                                                                                                                                                                                                                                                                           419..436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 401..800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                      note-
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note=
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                                                                                                               Robert-Guroff M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MN gp120 sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                        "CD4
                                                                                                                                                                                                                                                                                                                                                                                    "MHC II homology region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            "CD4 binding region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "V3 loop"
                                                                                                                                                                                                                                                                                                                                               "MHC II homology region consensus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          856
                                                                                                                                                                                                                                                                                                                                                                                                                      binding region consensus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 193; DB 12;
Pred. No. 9.9e-16;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΑA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunogen; diagnostic; peptomer
                                                                                                               Robey FA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36
                      0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence"
                    immunogens, or f
f native protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                        sequence"
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                                                                                                                                                                                                                                                                                                                                                  sequence"
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                                       or for
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RESULT 12
AAW11579
ID AAW11
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YX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ΧX
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Best Local :
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide analogues of HIV virus antigen contain a plurality of peptide monomers, each comprising the gp120 CD4 binding region consensus sequence (amino acids 419-436) (see AAR79172). The synthetic peptomers are useful as therapeutic agents, immunogens in vaccine compositions or for the diagnosts of disease. Since the analogues maintain the conformation of the native proteins from which they are derived (the consensus sequence), they are useful against infection by various HIV-1 and HIV-2 isolates (see
                                                                        The permuted circular unintegrated viral DNA representing the complete HIV-1(MN) genome was cloned into the Ecorl Site of Lambda gtwES.lambda B DNA from total DNA of H9 cells producing HIV-1(MN) isolate. The clone was designated lambda MN-PHI. The present sequence was deduced from the env gene region of the MN-PHI genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                              Sequence
                                                                                                                                                                                                 equivalents - useful as immunog-
typical of US clinical isolates
                                                                                                                                                                                                                                                                 WPI; 1997-011206/01.
N-PSDB; AAT58549.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW11579;
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                                                                                                                                                                      Example;
                                                                                                                                                                                                                   New isolated envelope protein of HIV-1 strain BA-L and recombinant equivalents - useful as immunogens for vaccines and antibody prodn.,
                                                                                                                                                                                                                                                                                                                                                                                          15-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                        17-OCT-1990;
25-FEB-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5576000-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Acquired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human Immunodeficiency Virus-1
                                                                                                                                                                                                                                                                                                              Popovic M,
                                                                                                                                                                                                                                                                                                                              Franchini
                                                                                                                                                                                                                                                                                                                                                         (USSH ) US DEPT HEALTH & HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
les 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                      Fig 3; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immune deficiency syndrome; AIDS; envelope protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
                                                                                                                                                                                                                                                                                                                           G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          856 AA;
                                              856 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                              Reitz MS;
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                                                                                                                                                                                                                                                                                                                              Gallo
                                                                                                                                                                                                                                                                                                                                                                                      90US-0599491.
93US-0022835.
95US-0388809.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       90US-0599491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein;
                                                                                                                                                                                                                                                                                                                              RC,
 100.0%;
                                                                                                                                                                                                                                                                                                                              Gartner S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       856
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 193; DB 16;
Pred. No. 9.9e-16;
   Score
Pred.
                                                                                                                                                                                                                                                                                                                                                             SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            strain MN-PH1 envelope protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
 193;
No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (strain MN-PH1).
                                                                                                                                                                                                                                                                                                                              Lori FC,
   3; DB 18;
. 9.9e-16;
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                                                                                                                                                                                                                                                                                                                              Markham
                Length 856
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                                                                                                                                                                                                                                                                                                                              PD
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                                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                   This sequence represents the Human Immunodeficiency Virus Type I (HIV-I) isolate MN envelope protein gpl20. This protein is used in a novel method to produce and analyse peptides oligomers, "peptomers", consisting of several peptide monomers arranged head to tail, each monomer comprising a sequence from a CD4-binding region of HIV gpl20. Such peptides are useful as assay reagents for detecting anti-HIV antibodies in biological samples, e.g. blood samples, or as a therapeutic agent for inhibiting infection of T cells by HIV and as an immunogenic agent for antibody production e.g. in vaccines. They are preferably synthetically produced and thus are consistent in the fire comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Envelope protein; gp120; peptomer; peptides oligomer; dete CD4-binding region; anti-HIV antibody; therapeutic; infect inhibition; T cell; immunogenic agent; antibody; vaccine;
                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                   produced and thus are consistent in their sequence and structure. Most HIV vaccines and detection peptides used currently rely on fragments of inactivated live viruses and thus may not contain the correct epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 1; 25pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HIV gp120 peptide oligomers -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Harris-Kelson TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-JAN-1995;
19-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US5750332-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV-1 isolate MN envelope protein gp120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-JUL-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW58805 standard; protein;
                                                                                                                                                                                                                                                        to elicit an immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (USSH ) US DEPT HEALTH & HUMAN SERVICES
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                                                                                                                  Local Similarity
1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36;
                                                                                                                                                                                                  856 AA;
                                                                                  100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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94US-0184330
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  401..800
/label=_CD4_binding_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          801..855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "region with MHC II homology"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /label= V3 loop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Robert-Guroff M,
                                                                                                                                                                                                                                                        response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          856
                                                                                     0;
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                                                                                                            Score 193; DB 19;
Pred. No. 9.9e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  useful as diagnostic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA
                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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                                                                                                                                      Length
                                                                                     Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 detection;
                                                                                                                                        856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Type I (HIV-I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              epitope
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                                                                               Gaps
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AAR94622
ID AARS
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AAW88111
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                                                                                                                                         RESULT 15
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                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                   The present sequence represents the predicted amino acid sequence of the MN-PHI clone envelope (env) protein MN-PHI is a Human immunodeficiency virus type 1 (HIV-1) clone. The specification also describes the env and rev coding sequences of the HIV-1 strain BA-L (ATCC 40890). BA-L is more typical of United States isolates of HIV-1 than previously known strains. Recombinant, complete env protein of the BA-L strain is used as a vaccine component and for immunotherapy of existing HIV infections, to detect HIV-specific antibodies, e.g. in donated blood, and as an immunogen to raise specific antibodies, for HIV-1 diagnosis.
                                                                    AAR94622;
                                                                                                      AAR94622 standard;
                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       assay reagent and to generate antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA encoding env protein of the human immune deficiency virus isolate BA-L - useful for producing protein for use in vaccines,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Franchini G,
Popovic M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5869313-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MN-PH1 clone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW88111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW88111 standard; Protein; 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Fig 3A-C; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-152779/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (USSH ) US DEPT HEALTH & HUMAN SERVICES
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15-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-MAY-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Predicted amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MN-PH1 clone; HIV-1; HIV-1 strain BA-L; envelope protein; vaccine; immunotherapy; HIV infection; immunogen; HIV-1 diagnosis; env; ds.
                                                                                                                                                                                             639 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       639 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                               1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                    36;
                                                                                                                                                                                                                                                                                                                                       856 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Reitz MS;
                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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93US-0022835.
95US-0388809.
96US-0647714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96US-0647714
                                                                                                      Protein; 1188 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RC,
                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence of the MN-PH1 envelope (env) protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gartner S,
                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                 Score 193; DB 20;
Pred. No. 9.9e-16;
                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lori FC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Markham PD
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                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                   856;
                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                Gaps
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HIV-1 gp160-NY5 p55 protein fusion

29-AUG-1996

(first entry)

. 0.

FT FT SXX XXX XXX

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В
                                                                             Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 36; Conservative 0;
                                                                                                                                                                                          plasmid A9760 contains a gene fusion (AAT15143) coding for a fusion protein (AAR94622) between HIV-1 gp160 and p55 proteins. The gene fusion was obtd. by cloning the gp160 coding p55 proteins into pUC19, cloning the gp55 coding sequence into Novablue TA PCR vector, ligating the p55 and gp160 sequences, and cloning the construct into the baculovirus expression vector MGS12, giving A9760, for expression in Spodoptera frugiperda cells. The fusion protein is useful as an immunogen in AIDS vaccines (e.g. to prevent mother to baby transfer of HIV) or for diagnostic detection of HIV antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV-1; gp160; p55; immunogen; vaccine; AIDS; baculovirus; vector.
                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                            Isolated nucleic acid encoding HIV gpl20-gag fusion protein - useful as immunogen in vaccines, for detecting antibodies and treating HIV infections etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1996-020357/02.
N-PSDB; AAT15143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-NOV-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Debartolomeis J, Hackett CS,
Volvovitz F;
                                                                                                                                                                                                                                                                                                                                                                                      Example 6; Fig 8A-8J; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MICR-) MICROGENESYS INC.
1188 AA;
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1121..1180
/label= p15
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154..191
/label= V2
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/label= V4
505..743
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'label= Sig_peptide
'note= "61k signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   label = p17
76..1120
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45..875
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.7..152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    abel= V3
                                                                                 0;
                                                                             Score 193; DB 17;
Pred. No. 1.4e-15;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Knell JD, Smith GE;
                                                                                   Indels
                                                                                                                     Length 1188;
                                                                                   0;
                                                                                 Gaps
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Search completed: May 16, 2003, 11:12:02 Job time: 32.4578 secs

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Title:
Perfect score:
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imum DB seq
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length: 0
length: 2000000000
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193
1 YTSLIYSLLEKSQT
                                                                                                                                                                                                                                 May 16, 2003, 11:04:54; Search time 12.1446 Seconds (without alignments) 284.970 Million cell updates/sec
                                                                                  283224 segs, 96134422 residues
                                                                                                                 BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                    YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                     Copyright
                                                                                                                                                                                                                                                                                                                                                     GenCore version (c) 1993 - 2003
                                                                                                                                                                                                                                                                                                                                                     5.1.4_p5_4578
Compugen Ltd.
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                                                  283224
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

Database :

pir1:*
pir2:*
pir3:*

Post-processing:

Minimum Match 0% Maximum Match 100 Listing first 45

100%

summaries

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	ω	2	1	No.	Result	
166	168	168	169	169	170	170	170	170	170	171	172	172	172	173	173	175	176	177	177	177	177	178	178	179	179	179	179	193	Score		
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357	859	856	843	357	852	358	358	358	357	445	852	847	847	855	846	357	357	861	856	854	851	855	853	861	856	443	358	859	Length		
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S22006	T01672	VCLJVL	H44001	S22004	T12016	S70417	S22000	S22002	S21992	A41621	VCLJBR	S13289	T09448	VCLJA2	VCLJND	S21996	S21994	VCLJLV	VCLJH3	S13288	S33985	VCLJZR	S54384	VCLJSC	VCLJ3W	C41621	S21998	VCLJMN	ij		
	6,	ס י		protein	glycopro	protein		protein	protein	env polyprotein M	env polyprotein -	env protein - huma	envelope glycoprot			protein	3	polyprotein	polyprotei			env polyprotein pr	0	polyprotein	env polyprotein pr	סי	elope protein	polypro	Description		

envelope protein gp120/gp41 - human immunodeficiency virus type 1 (;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 28 (;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000 C;Accession: S21998; S70425

A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus type 1 in blood and A;Reference number: S70417; MUID:92144209; PMID:1736940

cer

S70425

A; Molecule type: DNA A; Residues: 1-358 <STE1>

A; Description: Distinct populations of HIV-1 in blood and cerebrospinal fluid A; Reference number: 521990 A; Accession: 521998

R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991

Hacke,

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as dete

ALIGNMENTS

RESULT 1

C;Superfamily: type E retrovirus env polyprotein (C;Keywords: capsid protein; coat protein; glycoprotein; polyprotein; transmembrane pr E;1-29/Domain: slignal sequence #status predicted <SIG> F;30-859/Product: env polyprotein #status predicted <EPP> F;87,129,135,140,141,146,161,165,191,202,246,267,281,294,300,336,343,359,365,389,395, В QΥ R;Gurgo, C.; Guo, H.G.; Franchini, G.; Aldovini, A.; Collalti, E.; Farrell, K.; Wong-Virology 164, 531-536, 1988
A;Title: Envelope sequences of two new United States HTV-1 isolates.
A;Reference number: A28922; MUID:88219542; PMID:3389091
A;Accession: A28922 RESULT 2 A; Gene: C; Genetics: A; Molecule type: DNA A; Residues: 1-859 <GUR> C; Accession: A; Note: host Homo sapiens (man) C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-1997 C; Species: human immunodeficiency virus type 1, HIV-1 env polyprotein precursor - human in N; Alternate names: coat polyprotein Query Match
Best Local Similarity
Matches 36; Conserv 642 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF env A28922 100.0%; Score 193; DB 1; llarity 100.0%; Pred. No. 1.1e-15; Conservative 0; Mismatches 0; human immunodeficiency virus type 1 (isolate MN) 36 677 Length 859; Indels 0; Gaps 0; pr

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A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-222, X',224-358 <STE2>
A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183
C;Superfamily: type E retrovirus env polyprotein
                                           C; Keywords:
F; 1-29/Domai
                                                                                                                                                                                                                                           R;Starcich, B.R.; Hahn, B.H.; Shaw, G.M.; McNeely, P.D.; Modrow, Cell 45, 637-648, 1986
A;Title: Identification and characterization of conserved and va. A;Reference number: A24774; MUID:86218077; PMID:2423250
F;502-847/Product: coat
                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-856 <S
                                                                                                                                                                                                                      A; Accession: A24774
                                                                                                                                                                                                                                                                                                                                                                                                             VCLJ3W env polyprotein precursor - human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Superfamily: type E retrovirus env polyprotein
C;Reywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency;
E;1-251/Product: coat protein gp100 (fragment) #status predicted <GP1>
F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;424-443/Domain: transmembrane #status predicted <TMN>
F;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding
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                                                                                                                                                         A;Cross-references: GB:K03455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus type 1 nucleotide sequence diversity
A;Reference number: A41621; MUID:92107924; PMID:1763038
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: DNA
A;Residues: 1-443 <BUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R; Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, P.N.; Gibbs, R.A.
Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession:
                                                                                                                                                                                                                                                                                                                        ; coat protein gp120; coat protein gp41
; Species: human immunodeficiency virus type 1, HIV-1; Date: 30-Sep-1988 #sequence_revision 30-Sep-1988 #te; Accession: A24774
               Superfamily: type E retrovirus env polyprotein; keywords: coat protein; glycoprotein; polyprotein; t; 1-29/Domain: signal sequence #status predicted <SIG>; 1-29/Domain: signal sequence #status predicted 50-501/Product: coat protein gp120 #status predicted
                                                                                                                                    Genetics
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Best Local
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                                                                                                                                                                               1-856 <STA>
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  protein
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88.9%;
                                                                                                                                                                                                                                             characterization of conserved and variable regions MUID:86218077; PMID:2423250
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Pred. No. 2.8e-14;
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Pred. No. 2.2e-14;
  #status
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predicted
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                                                               transmembrane
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  N; Alternate
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                    polyprotein
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A;Cross-references: EMBL:M22639; NID:g329377; PI:
C;Superfamily: type E retrovirus env polyprotein
C;Keywords: polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Gene: env A;Gene: env polyprotein
A;Gene: env polyprotein
C;Superfamily: type E retrovirus env polyprotein; glycoprotein; polyprotein; transmembrane pr
C;Keywords: capsid protein; coat protein; glycoprotein; polyprotein; transmembrane pr
E;1-29/Domain: signal sequence #status predicted <SIG>
E;30-861/Product: env polyprotein #status predicted <EPP>
E;87,129,135,140,143,159,163,187,198,234,241,262,276,295,301,302,333,340,356,362,386,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Reference number: A28922; MUID:88219542; PMID:3369091
A;Accession: B28922
                                                                                                                                                                                                                                                                                                                         submitted to the EMBL Data A; Reference number: $54377 A; Accession: $54384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-861 <GUR>
C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Note: host Homo sapiens (man)
C; Date: 31-Dec-1990 #sequence_revision
C; Accession: B28922
               RESULT
                                                                                                                                                                                                                                                                                                                                                                                  R; Theodore,
                                                                                                                                                                                                                                                                                                                                                                                                                  C;Species: human immunodeficiency virus
C;Date: 15-Jul-1995 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                                                                                       envelope polyprotein - human immunodeficiency virus type
C:Species: human immunodeficiency virus type 1, HIV-1
VCLJZR
                                                                                                                                                                                                                                                                        A; Molecule type: genomic A; Residues: 1-853 <THE>
                                                                                                                                                                                                                                                                                           A;Molecule
                                                                                                                                                                                                                                                                                                        A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S54384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Species: human immunodeficiency virus type 1, HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N; Alternate names:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 F;87,134,140,151,155,183,197,234,241,262,276,289,295,331,338,354,360,390,394,404,447
                                                                                                                                                                                                                                                                                                                                                                                                   ; Accession:
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                                                                      YTGLIYRLIEESQTQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                 Similarity
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531-536, 1988
                                                                                                                                            Conservative
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88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                 virus type 1, HIV
ision 01-Sep-1995
                                                                                                                                                               Score 178; DB 2; Pred. No. 7.8e-14;
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Pred. No. 5.9e-14
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                                                                                                                                                                              Length 853
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precursor -

human immunodeficiency

virus

2r-6

polyprotein

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Fri May 1
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Gene 52, 71-82, 1987
A;Title: Molecular characterization of human A;Reference number: A26192; MUID:87248097; PW A;Accession: D26192
                                          A; Residues. - C; Superfamily:
                                                                                                                                                                                                                          env protein - human immunodeficiency virus type 1
C; Species: human immunodeficiency virus type 1, HIV-1
C; Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Date: 19-Ma
C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                env polyprotein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #to
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C;Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 16-Jul-1999
C;Accession: D26192
                                                                                                                     A; Title: HIV-1 tropism for A; Reference number: S13288; A; Accession: S13288
                                                                                                                                                                                            C;Accession: S13288
R;O'Brien, W.A.; Koyanagi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: EMBL:Z11530;
C;Superfamily: type E retrovirus
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A; Residues: 1-851 < CAR>
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A; Residues: 1-855 <SRI>
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                                                                                                        A;Status:
                                                                                                                                                                             Nature 348, 69-73, 1990
                                                                                                                                                                                                                                                                                     S13288
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                                                ;Molecule type: DNA
;Residues: 1-854 <OBR>
;Superfamily: type E retrovirus
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20-500/Product: exterior membrane glycoprotein #status predicted <EXT>
501-855/Product: transmembrane glycoprotein #status predicted <TMM>
87,129,140,145,154,158,186,189,199,236,243,264,278,291,297,333,340,355
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                                                                                                      preliminary
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Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S33979
                                                                                                                                      for mononuclear phagocytes can be 3288; MUID:91043044; PMID:2172833
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88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                91.7%;
88.9%;
91
88
                                                                                                                                                                                          Y.; Namazie,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Library,
.7%;
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                                                  env polyprotein
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Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 177;
Pred. No. :
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2; Mismatches
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NO.
                                                                                                                                                                                            A.; Zhao,
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; DB 2;
1e-13;
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2;
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                                                                                                                                                                                            J.Q.; Diagne, A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #text_change
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              Length
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                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                            Zack, J
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                Matches
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C; Superfamily: type E retrovirus env polyprotein C; Keywords: AIDS; capsid protein; coat protein;
                                                                                                                                                                                                                                                                                                                                                          R; Wain-Hobson, S.; Cell 40, 9-17, 1985
                                                                                                                             C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immun F;1-30/Domain: signal sequence #status predicted <SIG> F;31-516/Product: exterior membrane glycoprotein #status predicted
                                                                                                                                                                                                           A; Gene: env
                                                                                                                                                                                                                                 C; Genetics:
                                                                                                                                                                                                                                              A; Cross-references: GB: K02013;
                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-861 <W
                                                                                                                                                                                                                                                                                                    A; Reference number: A90866; A; Accession: A03975
                                                                                                                                                                                                                                                                                                                                            A; Title: Nucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                  C; Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                    C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Species: human immunodeficiency virus type 1, HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            F;512-856/Product: transmembrane glycoprotein **status predicted <TMM>
F;88,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,
F;611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) **status pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Superfamily: type E retrovirus env polyprotein (5;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immur F;1-30/Domain: signal sequence #status predicted <SIG>F;31-511/Product: exterior membrane glycoprotein #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Gene: env
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Residues: 1-856 < RAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Reference number: A93353; A; Accession: A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Title: Complete nucleotide sequence of the AIDS virus, A;Reference number: A93353; MUID:85111123; PMID:2578615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nberger, J.A.; Papas, T.S.
Nature 313, 277-284, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Ratner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession: A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Note: host Homo sapiens (man) C;Date: 17-May-1985 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N; Alternate names:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VCLJLV
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                   Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            636
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32;
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                   Similarity
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Conservative
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88.9%;
                 91.7%;
88.9%;
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мUID:85099333;
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                                                                                                                                                                                                                                            NID: g326417; PIDN: AAB59751.1;
                                                                                                                                                                                                                                                                                                                                                                                Danos,
               Score 177; DB 1
Pred. No. le-13;
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Pred. No. 1e-13;
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Mismatches
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                                                                                                                                                                                                                                                                                                                                              virus,
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                                                                                                                                                                                                                                                                                                                                                                              Cole,
                                                                                                                                                                                                                                                                                                                          PMID: 2981635
                                     DB 1;
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                               Length 861
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Indels
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                                                                                                                                                                                                                                              PID: g326424
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                                                                                                                                                                 immunodeficiency; polyp
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                                                                                                                                 <EXT>
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Gaps
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A; Residues: 1-357 <ST2>
A; Cross-references: EMBL.X61356; NID:g60181; PIDN:CAA43624.1;
A; Experimental source: patient 27L
A; Note: submitted to the EMBL Data Library, July 1991
A; Note: submitted to the EMBL Data Library, July 1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: human immunodeficiency virus A;Variety: isolate 27B C;Date: 20-Feb-1995 *sequence_revision
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               dd
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  N; Alternate names: coat protein
                                               env polyprotein precursor - human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patient 27L) (Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999 C;Accession: S70422; S21996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-140,'X',142-312,'X',314-357
A; Cross-references: EMBL:X61355; NID:g601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           coss-references: EMBL:X61355; NID:g60179; PIDN:CAA43622.1; PID:g60180 euler, H.; Storch-Hagenlocher, B.; Wildemann, B. ArdS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus type 1 in blood and A;Reference number: S70417; MUID:92144209; PMID:1736940 A;Accession: S70421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       envelope protein gp120/gp41 - human immunodeficiency virus type
C; Species: human immunodeficiency virus type 1, HIV-1
                                                                                              RESULT 14
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A; Residues: 1-357 <STE1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.

'SS en Hum. Retroviruses 8, 53-59, 1990

'tle: Distinct populations of human immunodeficiency virus

'eference number: $70417; MUID:92144209; PMID:1736940
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                                                                                                                                                             YTGLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 174
                                                                                                                                                                                                       YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               preliminary
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                                                                                                                                                                                                                                                    h 90.7%;
Similarity 86.1%;
31; Conservative
                                                                                                                                                                                                                                                                                                                                             type E retrovirus
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polyprotein
gp120; coa
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86.1%;
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No. 5.1e-14;
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4; Mismatches
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                                                                                                                                                                                                                                                                                              Length 357;
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                                               type 1 (isolate NDK)
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A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein;
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp
E;1-30/Domain: signal sequence #status predicted <SIG>
E;31-509/Product: exterior membrane glycoprotein #status predicted <EXT>
E;31-695/Product: transmembrane glycoprotein #status predicted <TMM>
E;510-855/Product: transmembrane glycoprotein #status predicted <TMM>
E;510-855/Product: 1140,190,200,244,265,292,298,304,334,341,358,364,388,394,400,408,445,
E;67,129,140,158,114,190,200,244,265,292,298,304,334,341,588,364,388,394,400,408,445,
E;67,129,140,158,104,190,200,244,265,292,298,304,304,304,304,308,304,304,308,304,304,308,304,304,308,304,304,308,304,304,308,304,304,308,304,304,308,304,304,308,304,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,304,308,30
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C:Superfamily: type E retrovirus env polyprotein
C:Keywords: AIDS; capsid protein; coat protein; glycoprotein;
F:1-29/Domain: signal sequence #status predicted <SIG>
F:1-29/Domain: signal sequence #status predicted <GIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:K02007; NID:g328658; PIDN:AAB59882.1; C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R:Sanchez-Pescador, R.; Power, M.D.; Barr, P.J.; Steimer, K.S.; Stempien, M.M.; Brown Science 227, 484-492, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 F;502-846/Product: coat protein gp41 #status predicted <CP2>
F;502-520/Domain: transmembrane #status predicted <TM1>
F;607-504-692/Domain: transmembrane #status predicted <TM2>
F;674-692/Domain: transmembrane #status predicted <TM2>
F;674-692/Domain: 179,182,229,236,257,271,284,290,351,382,388,392,395,401,438,451,452,601
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A;Title: Nucleotide sequence
A;Reference number: JQ0065; M
A;Accession: JQ0066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-855 <SAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: A03976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Title: Nucleotide sequence and expression of an AIDS-associated retrovirus A; Reference number: A04003; MUID:85090453; PMID:2578227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Accession: A03976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N; Alternate names: coat polyprotein C; Species: human immunodeficiency virus type 1, HIV-1 \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          env polyprotein precursor - human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          F;30-501/Product: coat protein gp120 #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Note: the authors translated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-846 <SPI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R; Spire, B.; Sire, J.; Zachar, V.; Rey, F.; Barre-Sinoussi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Date: 30-Sep-1991 #sequence_revision
C;Accession: J00066
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                                                                                                                                                                        Matches
                                                                                                                                                                                                                                               Query Match
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                                                                               1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         host Homo sapiens (man)
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YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                   l Similarity 86.31; Conservative
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86.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NID:g328154; PIDN:AAA44873.1; the codon GCG for residue 523
                                                                                                                                                                                                                                                                                                                                            carbohydrate
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Pred. No. 3.2e-13;
Pred. No. 3.2e-13;
                                                                                                                                                                                                           Score 173;
Pred. No. 3.
                                                                                                                                                                        Mismatches
                                                                                                                                                                                              No.
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                                                                                                                                                                   DB 1; 1
3.2e-13;
nes 2;
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1 YTSLIYSLLEKSQTO
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Pfam; PF00516; GP120;
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J. Virol. 64:4016-4020(1990).
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MEDLINE-90317906; PubMed-2370688;
York-Higgins D., Cheng-Mayer C., Ba
"Human immunodeficiency virus type
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replication, and cycopathicity are
the viral genome.";
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13-AUG-1987 (Rel. 05, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
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MEDLINE-86245056; PubMed
Alizon M., Wain-Hobson S
"Genetic variability of
                                                                                          Human immunodeficiency Viruses; Retroid viruse NCBI_TaxID=11689;
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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
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Gurgo C., Guo H.-G., Franchini G., Aldovini A., Collalti E., Farrell K., Wong-Staal F., Gallo R.C., Reitz M.S. Jr.;
"Envelope sequences of two new United States HIV-1 isolates.";
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11702;
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IPR000328; Env_GP41.
IPR000777; GP120.
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TRANSMEMBRANE GLYCOPROTEIN.
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RESULT 5
ENV_HV1W1
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Best Local Similarity
Matches 32; Conser
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDLINE-86218077; PubMed-2423250;

Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D., Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Parks W.P., Josephs S.F., Parks W.P., Pa
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-i- MISCELLANEOUS: ISCLATES WMJ1, WMJ
BLOOD SAMPLES SEQUENTIALLY TAKEN
WAS PERINATALLY INFECTED BY HER M
PIR: A24174; VCLJ3W.
InterPro: IPR000328; Env_GP41.
InterPro: IPR000777; GP120.
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NCBI_TaxID=31678;
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annotation update)
precursor [Contains: Exterior membrane
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01-OCT-1989 (Rel. 12, Last sequence update)
16-OCT-2091 (Rel. 40, Last annotation update)
Envelope polyprotein GP100 precursor [Contains: glycoprotein (GP120); Transmembrane glycoprotein
                                                                                                                                                              AIDS;
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                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                 entities requires a license agreement (S or send an email to license@isb-sib.ch).
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PF00517; GP41; 1.
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es; Retroid viruses; Ret
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IPR000777; GP120.
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                                                  Sanchez-Pescador R.;
Molecular characterization of human Zaire: nucleotide sequence analysis i domains in the envelope gene.";
Gene 52:71-82(1987).
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MEDLINE=87248097; PubMed=3036660;
Srinivasan A., Anand R., York D., Ranganathan Schochetman G., Curran J., Kalyanaraman V.S.,
                                                                                                                                                                                                                                         glycoprotein
  between the
the European
                                                                                                                                                                                   Human immunodeficiency Viruses; Retroid viruse NCBI_TaxID=11708;
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SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
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32; Conserv
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polyprotein GP160 precursor [Contains:
tein (GP120); Transmembrane glycoproteir
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Luciw P.A.,
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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13-AUG-1987 (Rel. 05, Last s
15-JUL-1999 (Rel. 38, Last a
Envelope polyprotein GP160 p
glycoprotein (GP120); Transm
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Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich B.
Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A.,
Baumelster K., Tvanoff L., Petteway S.R. Jr., Pearson M.L.,
Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gallo
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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between the
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Nature 313:277-284(1985)
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es; Retroviridae; Lentivirus.
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J. Biol. Chem. 265:10373-10382(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENV_HV1B1
P03375;
CHAIN
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                                           Signal.
SIGNAL
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
glycoprotein (GP120); Transmembrane glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                      Baumeister K., Ivanoff L.,
Lautenberger J.A., Papas T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency
Viruses; Retroid viruse
NCBI_TaxID=11678;
                                                                              AIDS;
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HIV;
                                                                                                                                                                                use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                 Gregory T.J.;
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Leonard C.K., Spe
                                                                                                                                                                                                                                                                                                                                                                                                                        Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich B.R., Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A., Baumeister K., Ivanoff L., Petteway S.R. Jr., Pearson M.L., Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gallo R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE, FROM N.A. MEDLINE-85111123;
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the European Bioinformatics Institute
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                                                                                                                                        M15654;
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IPR000777; GP120.
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                                      7299196; PubMed-3040055; Fisher A., Jagodzinski ., Wong-Staal F.; nucleotide sequences of
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Jagodzinski L.L.,
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modified and this statement is not remove
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or send an email to license@isb-sib.ch).
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InterPro; IPR000777; GP120.
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Shaw G.M., Wong-Staal F., Reddy E.P.;
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NCBI_TaxID=11707;
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Viruses; Retroid viruses; Retroviridae; Lentivirus
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                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-95127297; PubMed-/020000, Reitz M.S. Jr., Hall L., Robert-Guroff M., La Reitz M.S. Jr., Weiss S.H., Waters D., Weiss S.H., Waters D.,
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GB160 precursor [Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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Pfam; PF00517; GP41; 1.
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                                                                  the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE-8509933; PubMed-2981635;
MEDINE-8509933; PubMed-2981635;
Main-Hobson S., Sonigo P., Danos
"Nucleotide sequence of the AIDS
Cell 40:9-17(1985).
      InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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RESULT 14
ENV_HVIS1
ID ENV_HVIS1
AC P1950;
DT 01-FEB-199
DT 15-JUL-199
DT 15-JUL-199
DE ENVelope p
DE 91ycoptote
GN ENV.
OS Human immu
OC Viruses; R
OX NCBI_TaxID
RN [1]
RP SEQUENCE F
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               Human immunodeficiency
Viruses; Retroid viruse
NCBI_TaxID=11691;
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                                                             01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: I
glycoprotein (GF120); Transmembrane glycoprotein
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                                     virus type 1 (SF162 isolate) (HIV-1)
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RESULT 15
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HIV; M38428; ENV$SF162.
InterPro; IPR000328; ENV_GP41.
InterPro; IPR000777; GP120.
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ENV_HV1MF
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01-FEB-1991 (Rel.
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Pfam; PF00517; GP41;
AIDS; Coat protein; Po
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J. Virol. 64:3792-3803(1990).
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Viruses; Retroid viruses;
NCBI_TaxID=11704;
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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991 (Rel. 17, Last sequence update)
999 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation (Contains: l
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gerty S., Lamoni
    Polyprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         virus type 1 (MFA isolate) (HIV-1).
es; Retroviridae; Lentivirus.
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(POTENTIAL)

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FT CARBOHYD 635 635 N-LINKED (GLCNAC...) (POTENTIAL).

FT CARBOHYD 748 748 N-LINKED (GLCNAC...) (POTENTIAL).

FT CARBOHYD 814 814 N-LINKED (GLCNAC...) (POTENTIAL).

SQ SEQUENCE 853 AA; 96912 MW; 3377B993B6F22ABA CRC64;

Query Match
Best Local Similarity 86.1%; Pred. No. 5.2e-14;
Matches 31; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Qy 1 YTSLIYSLLEKSQTQOEKNEQELLELDKWASLWNWF 36

Oy 1 YTSLIYSLLEKSQTQOEKNEQELLELDKWASLWNWF 36

OB 636 YTSLIHSLIDESQNQOEKNEQELLELDKWASLWNWF 671

Search completed: May 16, 2003, 11:13:32
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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Maximum DB seq length: 2000000000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.5
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193
1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
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SUMMARIES

1100876648001	Result
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Length 857 861 117 112 122 127 129 852 49 122	
15 15 15 15 15 15 15 15 15 15	
ID 09YU15 09YU15 090294 090295 09YW3 09FW3 09FW3 09FW3 09FW2 069990 069990 069990 069909	
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O41556 human	Q8q2x2 human	Q80023 human	Q78120 human	Q9iwq5 human	Q9ea80 human	Q9ea92 human	Q9ea99 human	Q9qiu3 huma			Q72494 human			Q78225 human		Q03806 human	Q9yyx1 human				Q9qiu8 human					. Q69906 human		Q8q865 human
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1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36	Query Match 100.0%; Score 193; DB 15; Length 857; Best Local Similarity 100.0%; Pred. No. 3e-15; Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps	SEQUENCE 857 AA; 97095 MW; 922D362E10C60DA8 CRC64;	AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.	Pfam; PF00517; GP41; 1.)516; GP120;	InterPro; IPR000777; GP120.	-		1 MN to antibodies directed at V3 and non-V3 epitopes.";	neutralization resistance of variant human immunodeficiency virus type	"Mutations in both gp120 and gp41 are responsible for the broad	STRAIN=MN;	SEQUENCE FROM N.A.	[1]	NCBI_TaxID=11676;	Human immunodeficiency virus type 1.	ENV	vcoprotein .	(TrEMBLrel. 19,	(TrEMBLrel. 10,	01-MAY-1999 (TrEMBLrel. 10, Created)	Q9YUL5 PRELIMINARY; PRT; 857 AA.	OLT 1 .

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Matches 36
Query Match
Best Local Similarity
                                                                                       EMBL; AF075720; AAC31817.1; ...
InterPro: IPR000328; Env_GP41.
InterPro: IPR000777; GP120.
Pfam; PF00516; GP120: 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein
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01-NOV-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retrovirio
                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-MN;
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Envelope glycoprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Park E.J., Vujcic L.K., Anand R., Theodore T.S., Quinnan G.V. Jr.; "Mutations in both gp10 and gp41 are responsible for the broad neutralization resistance of variant human immunodeficiency virus type 1 MN to antibodies directed at V3 and non-V3 epitopes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         090294;
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                                                                                                                                                                                                                                                                                 "Mutations in both gp120 and gp41 are responsible for the broad neutralization resistance of variant human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                  Park E.J., Vujcic L.K., Anand R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=11676;
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NCBI_TaxID=11676;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                639
                                                                                                                                                                                                                                MN to antibodies directed at V3 . Virol. 72:7099-7107(1998).
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36; Conser
                                                                      protein;
861 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72:7099-7107(1998).
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861 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     viruses;
                                                                 Glycoprotein; Polyprotein; Transmembrane. 97617 MW; 36593D08429DC700 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein;
97671 MW; 81:
  100.0%;
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19,
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19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Retroviridae; Lentivirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Theodore T.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              type
  Score
Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 193; DB 1
Pred. No. 3e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in; Polyprotein; Transmer 8136732E44445E56 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                              and
                                                                                                                                                                                                                                                                                                          Theodore T.S., Quinnan G.V. Jr.; are responsible for the broad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ب
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  ; DB 15;
3e-15;
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Best Local S
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Q9EA81;
Q1-MAR-2001 (TrEMBLrel. 16, Create
Q1-MAR-2001 (TrEMBLrel. 19, Last &
Q1-DEC-2001 (TrEMBLrel. 19, Last &
Envelope glycoprotein (Fragment).
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Q9YYW3;
01-MAY-1999
01-MAY-1999
01-DEC-2001
Transmembrane.
NON_TER 122
SEQUENCE 122
                                                                 diversity in the United States.";
J. Infect. Dis. 181:470-475(2000).
EMBL; AF190971; AAG02333.1; -.
                                                                                              MEDLINE=20134570; PubMed=10669328; Weidle P.J., Ganea C.E., Irwin K.L., Pieniazek D., McGowan J.P. Olivo N., Ramos A., Schable C., Lal R.B., Holmberg S.D., Ernst "Presence of human immunodeficiency virus (HTV) type 1, group New York: a sentinel site for monitoring HTV c subtypes, Bronx, New York: a sentinel site for monitoring HTV c
                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
                                                                                                                                                                                                 Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
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                                           InterPro; IPR000328; Pfam; PF00517; GP41;
                                                                                                                                                         STRAIN=BX923;
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Pred. No. 5
  C3FE4DB1F8B5BCBD CRC64;
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725
09YYZ5;
09YYZ5;
01-MAY-1999
   Transmembrane.
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NON_TER
129
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01-DEC-2001
                                                      Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases EMBL; AF006888; AAD01332.1; -. InterPro; IPR000328; Env_GP41. pfam; PF00517; GP41; 1.
                                                                                                                                       Brennan C.A., Lund J.K., Golden A., Yamaguchi J., Phillips J.F., Kataaha P.K., Jackson J.B., Devare "Serologic and Phylogenetic Characterization of H:
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Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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01-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=326.570;
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2; Mismatches
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Pred. No. 5.3e-15;
1; Mismatches 1;
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Pred. No. 7
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s.G.;
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Q69992
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                                                Q69990 PRELIMINARY;
Q69990;
Q1-NOV-1996 (TrEMBLrel. 01,
Q1-NOV-1996 (TrEMBLrel. 19,
Q1-DEC-2001 (TrEMBLrel. 19,
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SEQUENCE
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Q69992;
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Karlsson G., Sodroski J., Morgado M.,
von Briesen H., Beddows S., Weber J.,
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                   ENV.
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Pfam; PF00517; GP41; 1.
ALDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (APR-1994) to the EMBL/GenBank/DDBJ EMBL; U08443; AAB04067.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              numan immunodeficiency virus type 1 sequence subtypes A through WHO and NIAID Networks for HIV Isolation and Characterization."; Virol. 70:1651-1657(1996).
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   Human
                                  Envelope
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Viruses; Retroid viruses; Retroviridae;
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InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hahn B.H.;
                                                                                                                                                                                                         634 YTSLIYSLIEESQSQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molecular cloning and analysis of functional envelope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           85 YTGLIYSLIEESQTQQEKNEQELLELDKWASLWNWF 120
                                                                                                                                                                                                                                         1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
immunodeficiency
                                                                                                                                                                                                                                                                              l Similarity
33; Conser
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33; Conserv
                                  glycoprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DAIDS Variation Program;
                                                                                                                                                                                                                                                                                                                                                  852 AA;
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91.7%;
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91.7%;
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                                    (Fragment)
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                                               Last sequence up
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Last annotation updat
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                                                                                       Created)
                                                                                                                                                                                                                                                                          Score 183; DE Pred. No. 4.9e 3; Mismatches
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Pred. No. 7
                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                  B54CB545B3BFB22B
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                                                                   sequence update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , Thornton C.L., Craig Galvao-Castro B., Sharp P.M., Shaw G.M.,
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Matches 33
Query Match
Best Local
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Gao F., Morrison S.C., Robertson D.L., Thornton C.L.,
Karlsson G., Sodroski J., Morgado M., Galvao-Castro B.
von Briesen H., Beddows S., Weber J., Sharp P.M., Shaw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                       MEDLINE-94211861; PubMed-7512731; Conley A.J., Kessler J.A., Boots L.J., Tung J.S., Arnold E Keller P.M., Shaw A.R., Emini E.A.; "Neutralization of divergent human immunodeficiency virus variants and primary isolates by IAM-41-2F5, an anti-gp41 monoclonal antibody.";
                                                                                                                                                                                                                                                                                                             Q69909;
01-NOV-1996 (TrEMBLrel. 01,
01-NOV-1996 (TrEMBLrel. 01,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       McEvilly M.M.;
Submitted (APR-1994) to t
EMBL; U08442; AAB04065.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A
                                                                                                 monoclonal antibody.";
proc. Natl. Acad. Sci. U.S.A.
EMBL; U06739; AAA19152.1;
InterPro; IPR000328; Env_GP41.
                                                                                                                                                                                                                                            Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                Gp41 (Fragment)
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Interpro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (MAY-1994)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Molecular cloning and analysis of functional envelope genes from human immunodeficiency virus type 1 sequence subtypes A through G. WHO and NIAID Networks for HIV Isolation and Characterization."; Virol. 70:1651-1657(1996).
                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                      SEQUENCE
                                                              NON_TER
                                                                                         Pfam;
                                                                             Fransmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                             630 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                     TER
                                                                                         PF00517; GP41; 1.
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33; Conser
  Similarity
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1
                                        AA;
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6196 MW;
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91.78;
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  93
91
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  . 88;
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                                                                                                                                                                                                                                                                                                              Last sequence update)
Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 182; DB 15; Pred. No. 6.5e-14;
  Score
Pred.
                                         E9B618825B832D1E CRC64;
                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                91:3348-3352(1994).
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    181;
No.
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     5e-15;
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                DB 15;
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                Length 49;
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RESULT 12
056562
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Q9IJN3
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Matches 33
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01-OCT-2000
01-OCT-2000
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        heterosexual population in Buenos Aries, Argentina."; AIDS Res. Hum. Retroviruses 16:1007-1014(2000).
EMBL; AF220699; AAF76818.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            056562;
01-JUN-1998 (TrEMBLrel.
01-JUN-1998 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR000328; Env_GP41. pfam; PF00517; GP41; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
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Baggs J., Lal R., Pieniazek D.;
"Evidence for a high frequency of HTV-1 subtype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-AR48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=11676;
                      AIDS;
                                          Pfam; PF00516; GP120 Pfam; PF00517; GP41;
                                                                                     InterPro;
InterPro;
                                                                                                                              EMBL;
                                                                                                                                                                         "Comparison of complete env gene sequences from symptomatic primary HIV type 1 infection.";
                                                                                                                                                                                                                                                                                                                                                                         Viruses;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Transmembrane.
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                                                                                                                                                                                                                                          Ataman-Onal Y., Coiffier
                                                                                                                                                                                                                                                            MEDLINE-99372987;
                                                                                                                                                                                                                                                                                          STRAIN-PHI159
                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Envelope
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                                                                                                                                                         AIDS
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                                                                                                                                                                                                                      /errier B.;
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                                                                                                                                                    Res.
                                                                                                          res. Hum. Retroviruses 15:1035-1039(1999)
AF041128; AAC02519.1; -.
                      Coat
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                                                          IPR000328; Env_GP41.
IPR000777; GP120.
0516; GP120; 1.
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122 AA;
  protein;
851 AA;
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(TrembLrel. 15, Last sequence update)
(TrembLrel. 19, Last annotation update)
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                                                                                                                                                                                                                                          PubMed=10445815;
oiffier C., Giraud
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  Glycoprotein; Polyprotein; Transmembrane. 96811 MW; 519363B6FBBFB146 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93.8%;
91.7%;
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19,
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Last annotation updat
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1; Mismatches
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Query Match Best Local

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Local Similarity hes 32; Conserv

Conservative

93.8%; 88.9%;

Score 181; DB 15; Pred. No. 8.6e-14; 4; Mismatches 0;

Length 851; Indels

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ACCOMPAGNATION OF THE PROPERTY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
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Best Local
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Q9E1R7;
Q1-MAR-2001
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01-NOV-1996
01-NOV-1996
01-DEC-2001
              Cleghorn F.R., Jack N., Carr J.K., Edwards J., Mahab McDanal C.B., Connolly S.M., Goodman D., Bennetts R. Weinhold K.J., Bartholomew C., Blattner W.A., Greenb "A distinctive clade B HIV type 1 is heterosexually Trinidad and Tobago.";

Proc. Natl. Acad. Sci. U.S.A. 97:10532-10537(2000).

EMBL; APST7071; AAG22514.1;
InterPro; IPR000328; Env GP41.

InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2001 (TrEMBLrel. 01-MAR-2001 (TrEMBLrel. 01-JUN-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                             Viruses;
                                                                                                                                                                                                                                                                                                                                                                                              Envelope
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AIDS 10:39-46(1996).
EMBL; U36879; AAC55538.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENV.
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                                                                                                                                                                                                                                MEDLINE=20442410;
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Viruses; Retroid viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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PF00516;
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851 AA; 96525 MW; F985D6B4E881F718 CRC64;
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GP120;
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                                                                                                                                                                                                                         PubMed=10984542;
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for the rescue and analysis of functional HIV-1 for recombination in the vicinity of the tat/rev
                                                                                                                                                                                                                                                                                                                        virus type 1.
es; Retroviridae;
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Pred. No. 8.6e-14;
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Bennetts R.Q., O'
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01-NOV-1998
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SEQUENCE 855 AA;
                                                                                           pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein;
SEQUENCE 857 AA; 97064 MW; EOR
                                                                                                                                                                                               Park E.J., Vujcic L.K., Anand R., Theodore T.S., Quinnan G.V. Jr., "Mutations in both gp120 and gp41 are responsible for the broad neutralization resistance of variant human immunodeficiency virus
                                                                                                                                         InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                J. Virol. 72:7099-7107(1998).
EMBL; AF075721; AAC31818.1; -
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YTSLIYSCLEKSQTQQEKNEQELLGLDKWESLWNWF
                        YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
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Result
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Maximum Match 100%
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US-08-475-668A-5
US-08-475-668A-5
US-08-471-913A-5
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US-08-485-264A-5
US-08-474-349A-5
US-08-485-208A-5
US-08-965-056-15
US-08-965-056-15
US-08-965-076-1714-2
US-08-98-375-100-1
US-08-98-472-240A-2
US-08-4847-240A-2
US-08-4847-23B-240
US-09-315-304B-1360
US-09-315-304B-1360
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103.919 Million cell updates/sec
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                                  11, Appl
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1360, Ap
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US-09-570-921-27	US-09-570-921-12	US-09-570-921-3	US-08-647-714-6	US-08-388-809-6	US-08-022-835-6	US-08-965-056-13 ·	US-08-965-056-28	US-09-570-921-19	US-09-315-304B-643	US-09-082-279B-643	US-09-492-739-28	US-09-134-075-28	US-08-448-603A-28	US-09-315-304B-642	US-09-082-279B-642	US-09-315-304B-1361	US-09-082-279B-1361
Sequence 27, Appl	Sequence 12, Appl	Sequence 3, Appli		φ,	Sequence 6, Appli	Sequence 13, Appl		Sequence 19, Appl	•	Sequence 643, App	Sequence 28, Appl	Sequence 28, Appl	Sequence 28, Appl	Sequence 642, App	Sequence 642, App	Sequence 1361, Ap	Sequence 1361, Ap

ALIGNMENTS

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RESULT 1
US-08-073-028-5
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: amino acid
STRANDEDNESS: Single
TOPOLOGY
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ZIP: 10036
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: PLOPPY DISK
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                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (212) 77 TELEPHONE: (212) 869-8864/9741
                                                                                                                              Local Similarity
nes 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/073,028 FILING DATE: 07-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: New York
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                                        1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
New York
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                                                                                                                          Score 193; DB 1;
Pred. No. 2.9e-17;
); Mismatches 0;
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                                                                                                                                                                                                           Length 36;
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YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36

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                                                                                                                                    Sequence 5, Application US/08360107A Patent No. 6017536
                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: un
MOLECULE TYPE:
-08-486-099-5
                                                                                                                       GENERAL
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APPLICANT:
APPLICANT:
APPLICANT:
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                                                                  APPLICANT:
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APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF
TITLE OF INVENTION: MEMBRANE FUSION-ASSOCIATED EVENTS,
TITLE OF INVENTION: MEMBRANE FUSION-ASSOCIATED EVENTS,
NIMMED OF INVENTION: B VIRUS TRANSMISSION
                                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: COPUZZI, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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STATE: New York
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                                                                                                                      INFORMATION:
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10036-2711
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            Barney, Shawn O.
Lambert, Dennis M.
Petteway, Stephen R.
                                                              Bolognesi, Dani P. Matthews, Thomas J. Wild, Carl T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (212) 869-9741/8864
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                                                                                                                                                                                                                                                                                                            Conservative
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SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                  unknown
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N: 435
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                                                                                                                                                                                                                                                                                                                                           Length 36;
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                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, Application Patent No. 6020459
GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT:
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ATTORNEY/AGENT INFORMATION:
NAME: COruzzi 'racci'
                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                   TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: TBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                  NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                 COUNTRY: USA
ZIP: 10036-2711
                                                                                                  CITY: New York
STATE: New Yor
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COMPUTER: IBM PC OPERATING SYSTEM:
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66141 PENNIE
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                                                                                                  New York
                                                                                                                                  E: Pennie & Edmonds LLP
1155 Avenue of the Americas
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                                                                                                                                                                                                                                                                    Petteway, Stephen R
                                                                                                                                                                                                                                                                                                      Wild, Carl T.
Barney, Shawn O.
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PC-DOS/MS-DOS
                                                                                                                                                                                                   COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TRANSMISSION
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Pred. No. 2.9e-17;
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Best Local Similarity
Matches 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5,
                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/470,896
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7872-020
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF
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MOLECULE TYPE:
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ADDRESSEE: Pennie & Edmonds
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TELECOMMUNICATION INFORMATION:
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              FELECOMMUNICATION INFORMATION:
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                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                    APPLICATION NUMBER:
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Petteway, Stephen R.
Linglois, Alphonse J.
VENTION: METHODS AND COMPOSITIONS FOR INHIBITION
VENTION: OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
VENTION: TRANSMISSION
SEQUENCES: 273
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(212) 869-9741/8864
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                           TOPOLOGY: ur MOLECULE TYPE:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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LENGTH: 36 amino acids
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TELEFAX: (212) 869-9741/8864
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CORRESPONDENCE ADDRESS:
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                                                               Local Similarity
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REGISTRATION NUMBER: 3
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TOPOLOGY: ur
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                                                               Conservative
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                                                                            100.0%; Score 193; DB 3; 100.0%; Pred. No. 2.9e-17;
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                                                               Mismatches
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TITLE OF
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE
TITLE OF INVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING EPSTEIN-BARR VIRUS
TITLE OF INVENTION: TRANSMISSION
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
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CLASSIFICATION:
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1155 Avenue of the Americas
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Bolognesi, Dan.
Bolognesi, Thomas J.
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Matthews, Thomas
Wild, Carl T.
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                                                                                            Lambert, Dennis M.
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PRILING DATE: 06-NUV-1//
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                 SOFTWARE: PATENTIN Reli
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Bolognesi, Dani P. APPLICANT: Matthews, Thomas J. APPLICANT: Wild, Carl T.
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                              COUNTRY: U
ZIP: 10036
                                                                                                                                                                                                                                                                                  CITY: New York
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les 36; Conser
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                                                                                                                                                                                                                                                 USA
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(212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 193; DB 3; ilarity 100.0%; Pred. No. 2.9e+17; Conservative 0; Mismatches 0;
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                                                                                                                                      PatentIn Release #1.0, Version #1.25
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                                                                                                    US/08/554,616
                             US 08/073,028
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ATTORNEY/AGENT INFORMATION:

NAME: CORUZZI, Laura A. REGISTRATION NUMBER: 30 REFERENCE/DOCKET NUMBER:

30,742

7872-004-999

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RESULT 10
US-08-485-264A-5
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                           TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
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APPLICANT:
                                                                                                                                                    NAME: COTUZZÍ, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
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                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA: APPLICATION NUMBER: US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
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OLECULE TYPE:
                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                   FILING DATE: 07 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE:
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ZIP: 10036-2711
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                               STRANDEDNESS
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                                                          ENGTH:
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1155 Avenue of the Americas
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                                                                                                                       : (212) 790-9090
(212) 869-9741/8864
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Langlois, Alphonse J
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              unknown
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peptide
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Pred. No. 2.9e-17;
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RESULT 12
US-08-255-208A-5
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                                                                                                                             Matches
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION UNMBER: US/08/474,349A FILING DATE: 07-JUN-1995
                                                                                                                                                                                                       MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
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STATE: New Yor
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                                                              1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                            1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                             Local Similarity
es 36; Conserv
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                                                                                                                                          100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VIRUS TRANSMISSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Edmonds
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                                                                                                                                        Score 193; DB 4; Pred. No. 2.9e-17;
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Sequence 5, Application US/08255208A Patent No. 6440656

ENERAL INFORMATION:

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; ORGANISM: Human
US-09-570-921-15
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: Sequence 15, Application US/09570921

: Patent No. 6455265
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Best Local
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                                                                   SEQ ID
                                                                                                                                                                                                                                                                                           SENERAL INFORMATION:
                                                                                                                PRIOR APPLICATION NUMBER: PCT/FR98/02447
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: FR/97/14387
PRIOR FILING DATE: 1997-11-17
                                                                                                                                                                                    FILE REFERENCE: 106213
CURRENT APPLICATION NUMBER: US/09/570,921
CURRENT FILING DATE: 2000-05-15
                                                                                SOFTWARE:
                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: COTUZZI, Laura A. REGISTRATION NUMBER: 30,742
REGISTRATION NUMBER: 78:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                ENGTH: 138
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT, APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 07-JUN CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                               1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                             YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                                PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New York
                                                                                                                                                                                                                                      SERRES, PIERRE-FRANCOIS
VENTION: METHOD FOR OBTAINING VACCINES FOR PREVENTING THE
VENTION: PATHOGENIC EFFECTS RELATED TO A RETROVIRAL INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lambert, Dennis M.
Petteway Jr., Stephen R.
VENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matthews, Thomas J. Wild, Carl T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Barney, Shawn O.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unknown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 193; DB 4; Pred. No. 2.9e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                             RESULT 15
US-08-022-835-2
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               Patent No.
                             Sequence
                                                                                                                                                                Best Local Similarity Matches 36; Conserv
                                                                                                                                                                                            Query Match
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Best Local Similarity
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                  TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb f
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, Phb., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R
                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: WinPatin (Ge CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
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                                                                                                      167 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
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OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 05-No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE:
                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                  LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6271198
                                                                                                                                                                                                                                                     267 amino acids
Amino Acid
                           Application US/08022835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Andrew C.
                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Melissa A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                         Linear
                                                                                                                                                                                                                                                                                                                                650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genentech, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Christopher Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                     05-No. 6271198-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inch, 1.44 Mb floppy disk
                                                                                                                                                                               100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Constrained Helical Peptides and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Genentech)
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Pred. No. 1.2e-16;
                                                                                                                                                                               Score 193; DB 4;
Pred. No. 2.5e-16;
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                                                                                                         202
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                                                                                                                                                                                            Length 267;
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APPLICANT: APPLICANT: APPLICANT:

APPLICANT:

Markham, Phillip D. Gallo, Robert C.

Reitz Jr., Franchini,

Marvin S. Genoveffa

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APPLICATION: ....

FILING DATE:
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/599,491

FILING DATE: 17-OCT-1990

ATTORNEY/AGENT INFORMATION:
NAME: SCOTT, WATSON T.
REGISTRATION UNMBER: 26.581

REFERENCE/DOCKET NUMBER: WTS/5683/7

FILECOMMUNICATION INFORMATION:
TELEFAN: (202) 861-3000

TELEFAX: (202) 862-0944

TELEFAX: (202) 822-0944

TELEFAX: 6714627 CUSH
INFORMATION FOR SED ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 856 amino acids
TYPE: anino acids
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-022-835-2
Tch completed: May 16, 2003, 11:22:11 Tob time: 11.1928 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: Eleventh Floor, 1615 L. Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
2IP: 20036-5601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: READABLE PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/022,835
                                                                                                                                                                   Query Match
Best Local Similarity
Matches 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
STREET: Eleventh Floor, 1615 L. Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: POPOVIC, Mikulas
APPLICANT: Garnter, Suzanne
TITLE OF INVENTION: MOLECULAR CLONES OF HIV-1 AND USES
TITLE OF INVENTION: THEREOF
                                                                               100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          26,581
ER: WTS/5683/78507/SRL
                                                                                                                                                                 Score 193; DB 1;
Pred. No. 8.7e-16;
D; Mismatches 0;
                                                                                                                                                                                                       Length 856;
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                                                                                                                                                                 0;
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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run on:
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Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        length: 0
length: 2000000000
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Gapop 10.0 , Gapext 0.5
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193
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
/cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_UBCOMB.pep:*
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/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
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91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	92.2	92.7	92.7	92.7	93.3	93.8	100.0	Query Match
177	56	46	37.	36	36	36	36	36	36	36	36	269	269	268	233	268	269	267	Query Match Length
9	10	10	9	10	10	10	10	10	φ	9	9	10	10	10	10	10	10	10	DB
US-10-040-349B-2	US-09-779-451-4	US-09-779-451-41	US-09-848-616-176	US-09-854-816-108	US-09-854-816-1	US-09-834-628-1	US-09-779-451-5	us-09-796-202-10	US-09-493-346-1	US-10-116-797-1	US-09-874-475-16	US-09-854-816-46	US-09-854-816-12	US-09-854-816-9	US-09-854-816-50	US-09-854-816-13	US-09-854-816-28	US-09-854-816-15	ID
Sequence 2, Appli			Sequence 176, App	Sequence 108, App	1,	<u>~</u>	Sequence 5, Appli	Sequence 10, Appl	Sequence 1, Appli	7	~	Sequence 46, Appl	Sequence 12, Appl	9, A	Sequence 50, Appl	13,	Sequence 28, Appl	Sequence 15, Appl	Description

45	44	43	42	41.	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
175	176	176	176	176	. 176	176	176	176	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177
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46	847	646	619	269	268	268	46	36	1186	1101	861	856	853	519	391	345	345	344	268	268	268	256	254	232	221
10	10	10	10	10	10	10	10	10	9	9	9	10	9	10	9	10	9	9	10	10	10	9	9	ø	9
US-09-854-816-109	US-09-476-242-2	-609	US-09-891-609-4	US-09-854-816-45	US-09-854-816-40	US-09-854-816-26	US-09-779-451-48	US-09-779-451-50	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	US-10-040-349B-1	US-09-854-816-18	US-09-854-816-17	US-09-854-816-16	US-10-059-271-97	US-10-059-271-82	US-10-059-271-81	US-10-059-271-84
Sequence 109, App	Sequence 2, Appli		Sequence 4, Appli	•	40,	26,	48,	e 50,	Sequence 55, Appl		03	e 1,		e 8	Sequence 93, Appl		49	Sequence 1, Appli	Sequence 18, Appl	17	e 16	Sequence 97, Appl	Sequence 82, Appl	Sequence 81, Appl	Sequence 84, Appl

ALIGNMENTS

RESULT 1
US-09-854-816-15
; Sequence 15, Application US/09854816
; Patent No. US20020151473A1
; GENERAL INFORMATION: INFORMATION FOR SEQ ID NO: 15: SEQUENCE CHARACTERISTICS: ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
COMPUTER: JBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: WindPatin (Genentech)
CURRENT APPLICATION DATA: TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881 ATTORNEY/AGENT INFORMATION: PRIOR APPLICATION DATA: APPLICANT: Andrew C. Braisted TITLE OF INVENTION: CORRESPONDENCE ADDRESS NUMBER OF SEQUENCES: 113 APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown> NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2 APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> STATE: California ADDRESSEE: Genente STREET: 1 DNA Way COUNTRY: USA South San Francisco J. Christopher Phelan Melissa A. Starovaşnik J. Kevin Judice Robert S. McDowell James A. Wells Genentech, Inc. Constrained Helical Peptides and Methods of Making Same

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US-09-854-816-28
8
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Best Local Similarity
                                                                 Matches
                                                                               Query Match
Best Local Similarity
                                                                                                                                                              INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 269 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  167 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 202
169
                             1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 94080
COMPUTER REALDABLE FORM: . . . 1.44 Mb floppy disk
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible operating SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Timoth
REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Andrew C. Braisted
                                                                                                                                              TOPOLOGY: Linear SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
36;
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1 DNA Way
                                                                                                                                                                                                                                                    TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                  TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             James A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                             93.8%;
91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wells
                                                                               Score 181; DB 10;
Pred. No. 1.9e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 193; DB 10;
Pred. No. 6.8e-16;
                                                                                                                                                                                                                                                                                                                                         Timothy E.
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                                                                  Mismatches
                                                                                                                                                     28:
                                                                                                    DB 10;
                                                                                                Length 269;
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                                                                    Indels
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RESULT 3

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US-09-854-816-13
, Sequence 13, Application US/09854816
; Patent NO. US20020151473A1
; GENERAL INFORMATION:
APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                   В
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                                                                                                                                                                                                                                                      RESULT 4
US-09-854-816-50
                                                                                                                                                                                                 Sequence 50, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible operating SYSTEM: PC-DOS/MS-DOS SOFTMARE: WinPatin (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08/965,056
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARÁCTERISTICS:
LENGTH: 268 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
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MEDIUM TYPE: 3.5 i
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 113
                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                     APPLICANT:
                                  NUMBER OF SEQUENCES: 113
                                                                        TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Genentech, Inc.
ADDRESSEE: Genentech,
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INVENTION: Constrained Helical Peptides and Methods of
                                                                                    J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94080
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Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                                                                                 Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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                                                     Making Same
                                                                                                           Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                           Score 180; DB 10;
Pred. No. 2.5e-14;
                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 268;
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RESULT 5
US-09-854-816-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168
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nes 32; Conserv
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FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: TOICHIA, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Constrained Helical Peptides and Methods of
Making Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE DESCRIPTION: SEQ ID NO: 50:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: P1005R2 TELECOMMUNICATION INFORMATION:
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                                       PRIOR APPLICATION DATA:
                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                        FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 233 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: 650/225-86
TELEFAX: 650/952-9881
APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
                                                                             APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                CITY: South San F:
STATE: California
                                                                                                                                                                                                                                                                                                                        STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Andrew C. Braisted
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88.9%;
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                                                                                                                                                                                                                                                                                                   Francisco
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; SEQUENCE DESCRIPTION: US-09-854-816-12
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US-09-854-816-12
; Sequence 12, Application US/09854816
; Patent No. US20020151473A1
; GENERAL INFORMATION:
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Best Local S
Matches 32
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                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTMARE: WinPatin (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/854,816

FILING DATE: 15-May-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 203
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les 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                        NAME: TORCHIA, PhD., Timothy E. REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Genente
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE DESCRIPTION: SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 268 amino acids TYPE: Amino Acid TOPOLOGY: Linear
                                                                               TOPOLOGY: Linear
                                                                                                                                                                                   TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: California
                                                                                                 LENGTH: 269 amino acids TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 1 DNA Way
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              South San Francisco
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Melissa A. Starovasnik
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Robert S. McDowell
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92.7%;
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                                                          SEQ ID NO: 12:
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Score 179;
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DB 10;
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Length 269;
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US-09-854-816-46
US-09-854-816-46
Sequence 46, Application US/09854816
Patent No. US20020151473a1
GENERAL INFORMATION:
                                                                                                              US-09-874-475-16
                                                                                                                                    RESULT 8
                                                                                                                                                                                              В
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                                                                        Sequence 16, Application US/09874475 Publication No. US20020182592A1
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                        Matches
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APPLICANT: Petropoulos, Christos J. APPLICANT: Parkin, Neil T. APPLICANT: Whitcomb, Jeanette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO: 46:
                                                                                                                                                                                              169
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                                                                                                                                                                                                                1 YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
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MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatin (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/854,816

FILING DATE: 15-May-2001

CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 269 amino acids
TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
EILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
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                                                                                                                                                                                            YTSLIYSLIKESQNQQEKNEQELLELDKWASLWNWF 204
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: Linear
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lissa A. Starovasnik
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                                                                                                                                                                                                                                                                                        92.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Francisco
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3; Mismatches 1;
                                                                                                                                                                                                                                                                                        Score 178; DB 10;
Pred. No. 4.5e-14;
                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                          Length 269;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens US-10-116-797-1
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; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                  US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-116-797-1
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Best Local S
Matches 32
                                                                                     FILE REFERENCE: 61009
CURRENT APPLICATION NUMBER: US/09/493,346
CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/116,797
CURRENT FILING DATE: 2002-10-15
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/09493346 Publication No. US20030082185A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Olsen, William
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SEQ ID NO 16
LENGTH: 36
TYPE: PRT
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Best Local Similarity
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TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE
TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS
FILE REFERENCE: 2793/65166
CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                         TITLE OF INVENTION: Compositions and Methods TITLE OF INVENTION: Infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING
FILE REFERENCE: 64672-A
                                                                                                                                                                                                                                                                   APPLICANT: Olson, William C APPLICANT: Maddon, Paul J
                                                 ORGANISM: Artificial Sequence
                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 36
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nes 32; Conserv
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88.98;
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Pred. No. 6.7e-15;
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Pred. No. 6.7e-15;
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                                                                                                                                                                                                                                                   for Inhibition of HIV-1
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; FEATURE:
, NAME/KEY: PEPTIDE
; LOCATION: (1)..(36)
; OTHER INFORMATION: T-20
US-09-796-202-10
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                                                                                                                                      ; ORGANISM: Human immunodeficiency virus type 1
US-09-779-451-5
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Patent No. US20020094521A1
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                                                                  Matches
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Best Local
                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                     APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
ATTLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
ILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
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CURRENT FILING DATE: 2001-02-28
UMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version 3.0
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APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS:
                                                                                                                                                                    LENGTH: 36
TYPE: PRT
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TYPE: PRT
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Local Similarity 88.9%;
es 32; Conservative
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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 36
YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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88.9%;
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Pred. No. 6.7e-15;
                                                                              Score 177; DB 10;
Pred. No. 6.7e-15;
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Pred. No. 6.7e-15;
                                                                  Mismatches
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FILE REFERENCE: 05823.0198-00000
CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
LENGTH: 36
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US-09-854-816-1
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Best Local S
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APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PERTIDES FOR INHIBITION OF HIV INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: YU, YEON GYU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE: OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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les 32; Conserv
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                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
FILING DATE: CUNKNOWN
ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: p1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Andrew C. Braisted
                                                                                                                                                 APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                           STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                          CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
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Robert S. McDowell
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88.9%;
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Pred. No. 6.7e-15;
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TYPE: Amino acids
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TOPOLOGY: Linear
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MOLECULE TYPE: DP178
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SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-854-816-1
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                                                                                                              TYPE: Amino Acid
TOPOLOGY: Linear
SEQUENCE DESCRIPTION:
US-09-854-816-108
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                             Query Match
Best Local Similarity
Matches 32; Conserv
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Best Local Similarity 88.9%;
Matches 32; Conservative
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TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEPAX: 650/925-9881
INFORMATION FOR SEQ ID NO: 108:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 08/965,056
APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/ACENT INFORMATION:
NAME: TOrchia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: CUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Andrew C. Braisted
J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
                                                                                                                                                                                       LENGTH: 36 amino acids
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                                      Conservative
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                                                      91.7%;
88.9%;
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                                    Score 177; DB 10;
Pred. No. 6.7e-15;
3; Mismatches 1;
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Pred. No. 6.7e-15;
3; Mismatches 1.
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Db 1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

Search completed: May 16, 2003, 12:10:23 Job time: 16.759 secs

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Core polypeptide f
Viral Dp178/107-li
Viral Dr178/107-li
Viral core polypep
Viral core polypep
Dp178-like/Dp107-l
Dp178-like/Dp107-l
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T20/DP178 peptide
HIV-1 isolate LAI
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al DP178/107-	tin-labelled H	-1 qp41 pept	-1 gp41 peptid	i-HIV p	2 transmembra	viral envelop	e polypeptide	e polypeptide	e polypeptide	e polypeptide	e polypept	e polypeptide	ore polypeptide	ore polypeptide	polypeptide	peptide	-1 isolate LA	0/DP178 pept	0/DP178 peptid	/DP178 peptide	-1 LAI qı	tic pept	ID NO. 1 from	ID NO. 108 fr	-1 derived pe	178 corresponds	178 derived fr	IIV peptide	e polypeptid	Core polypeptide T				

RESULT 1 AAR64397 antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI; human immunodeficiency virus; transmembrane protein; gp41; alpha helix; leucine zipper; DP-185. 07-JUN-1993; 07-JUN-1994; WO9428920-A. Modified-site AAR64397 standard; Peptide; 35 AA 22-DEC-1994. Synthetic DP-178 homologue 66 derived from HIV-1 has antiviral activity. 25-AUG-1995 (first entry) AAR64397; Modified-site 93US-0073028. 94WO-US05739. 35 ∕note≕ /note= Location/Qualifiers "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier gp. attached" $\,$ "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic macromolecular carrier gp. attached"

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RESULT 2
AAB52687
  CCC X PRI T PRI X 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response up-regulation; chemoattractant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          truncated at the amino terminus DP-178 corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids)
                                                                                                                                                                                                                                                                            Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein-protein interactions, and possess anti-vira activity. The peptide derivs, were identified by a computer assisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 11;
                                                                                                                                                                                                                             WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Computer search generated synthetic
                    The
                                                                        Claim 12;
                                                                                                                                       Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formy peptide receptor partial-length T20/DP178 or T21/DP107 formy .
                                                                                                                                                                                                                                                                                                                             (USSH ) US DEPT HEALTH & HUMAN SERVICES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HIV transmission
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                                                                        Page 25; 148pp; English
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                                                                                                                                                                                                                                                                            Oppenheim
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Pred. No. 2.5e-16;
Mismatches 0;
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e fragment
n of HIV-1
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of T20/DP178. protein gp41.
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T20/DP178
T20/DP178
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RESULT 3
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Best Local
Sequences AAB14604-B14606 and AAB14607-B14670 represent peptides derived from the C-helical domain of the 9p41 envelope glycoprotein from HIV-1 group M, subtype B, isolate LAI. The invention relates to raising a neutralising antibody response to a broad spectrum of HIV (human immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or minics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or minic the coiled coil solution structure of the N-helical domain (the heptad repeat region), or can correspond or minic the C-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), or the 9p41 core 6-helix bundle, which is formed by the interaction of the N- and C-helical domains of three gp41 proteins. The peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gp41 transmembrane-proximal amphipathic alpha-helical segment; core 6-helix bundle; viral entry inhibition; immunogenic; antibody; humoral response; broad spectrum vaccine; anti-HIV; envelope glycoprotein; prophylaxis; therapy; group M; subtype isolate LAI.
                                                                                                                                                                                                                                                                                                                                                                                                                   (WILD/)
                                                                                                                                                                                                                                                                             Raising neutralizing antibody response to human immunodeficiency virus, comprises administering a polypeptide capable of forming a stable coiled-coil solution structure -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB14670;
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                                                                                                                                                                                                                                              Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                   Wild CT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JAN-1999;
07-JAN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV-1 isolate LAI gp41 C-helical domain peptide P-18,
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                                                                                                                                                                                                                                                                                                                                                  2000-465959/40
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35; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                   Weiss CD
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                                                                                                                                                                                                                                              Page 34;
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2000US-0480336
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                                                                                                                                                                                                                                             97pp; English.
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Pred. No. 2.5e-16;
. mismatches 0;
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RESULT 4
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ID AAY89388
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pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptides are bioactive peptides are or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation functions a growth factor, cytokine, differentiation functions are polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be multimerised. For example, N- and C-helical domain peptides can be alternately linked together to form a peptide which mimics the core 6-helix bundle. Administration of the peptide(s) generates a humoral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV cell entry.
                                                                                                                                                                                                                               sequence linked to core polypeptides. The enhancer polypeptides derived from various retroviral envelope (gp41) protein sequence
                                                                                                                                                                                                                                                                                                    The
                                                                                                                                                                                                                                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                          A new hybrid polypeptide with enhanced comprises enhancer sequence -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
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Pred. No. 2.5e-16;
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factor; cytokine; viral;
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                                                                             The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-1LAI transmembrane protein 9941. The HR1 and HR2 regions of proteins interact non-covalently with each other analyze with peptides derived from them. This interaction is required for analyze with peptides derived from them. This interaction is required for
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                                      repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used t
                                                                    normal infectivity of viruses such as RSV and HIV. The heptad
                                                                                                                                                                                         Disclosure;
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Mismatches 0;
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                                                                                                                                                                        and/or with peptides derived from them. This interaction is required normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory
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                                                                                                                                                                                                                                                                                                                               infection
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                                                    Score 188; DB 22;
Pred. No. 2.5e-16;
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n; transmembrane protein; gp41; HR1; HR2;
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RESULT 8
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        Human immunodeficiency virus; HIV; respiratory syncytial virus; virucide; heptad repeat region; transmembrane protein; gp41; HRI
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                                                                                                                                                                                                                                                                            Score 188; DB 22; Pred. No. 2.5e-16;
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No
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                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    respiratory syncytial virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               638
                                                      799.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lambert DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein;
                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gp41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sista
                                                                                                                                                                                                                                                                                             35;
                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        us; RSV;
HR1; HR2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               פי
                                                                                                                                                                                                                                                               Gaps
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HTV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required for normal infectivity of viruses such as RSV and HTV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to
                                                                                                                                                                                     Anti-retroviral; DP178-like; DP107-like; traantifusogenic; antiviral; HIV transmission;
                                                                                                                                                                                                                                                                                                     AAU13182 standard; Peptide;
05-JUL-2000; 2000WO-US35727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 379; 587pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Heptad repeat region peptide analogs useful for fusion, useful for treating HIV and Respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-514829/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antczak JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-FEB-2001; 2001WO-US03988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200164013-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viridiae
                         19-JUL-2001.
                                                                                     Modified-site
                                                                                                                                                   Synthetic
                                                                                                                                                                                                                         DP178-like/DP107-like peptide T-715.
                                                                                                                                                                                                                                                     21-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TRIM-) TRIMERIS INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-SEP-2001.
                                                WO200151673-A2
                                                                                                             Modified-site
                                                                                                                                                              Human immunodeficiency virus l isolate LAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inhibit HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                               specification.
                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Delmedico MK,
                                                                                                                                                                                                                                                  (first entry)
                                                                                 /note=
35
                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                 "N-terminal is substituted by
                                                                        "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is a peptide provided in
                                                                                                                                                                                                                                                                                                     35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Erickson
                                                                                                                                                                                                                                                                                                                                                                                                                Score 188; DB 22;
Pred. No. 2.5e-16;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JB,
                                                                                                                                                                                                                                                                                                                                                                  35
                                                                                                                                                                                                                                                                                                                                                                                          35
                                                                                                                                                                                                transmembrane protein gp41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lambert DM,
                                                                                                                                                                                       mutant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inhibiting virus/cells
Syncytial Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                       mutein.
                                                                                                 Ac.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          35;
                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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RESULT 10
AAU13342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to peptides which exhibit anti-retroviral cactivity. The peptides of the invention (AAU12559-AAU14009) comprise DP178-like and DP107-like peptides. The DP178 peptide corresponds to amino acids 639-673 of the transmembrane protein gp41 from human immunodeficiency virus 1 (HIV-1) isolate LAI. The DP107 peptide corresponds to amino acids 558-595 of gp41 from HIV-1LAI. The invention class relates to a method of identifying compounds that inhibit the formation of or disrupts a DP107/DP178 complex. The method comprises calso relates to a method of identifying compounds that inhibit the formation of a DP107/DP178 complex. The method comprises calso relates to a method is useful for identifying compounds, and DP107 and DP178 peptides. The method is useful for identifying compounds, cantifusogenic, antiviral or intracellular modulatory activity. The DP178-like/DP107-like peptides are useful to inhibit human and non-human retroviral, particularly HIV, transmission to uninfected cells. The present sequence represents one of the DP178-like/DP107-like peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                    antifusogenic; antiviral; HIV transmission; mutant; mutein
                                                                                                                                                                                                                                                                                                                                   21-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                   AAU13342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying a compound that inhibits the formation of or disrupts a DP107/DP178 complex, especially compounds with antifusogenic, antiviral or intracellular modulatory activity, by detecting the formation of a
                                                                                                                                                                                                                    Human immunodeficiency virus 1 isolate LAI
                                                                                                                                                                                                                                                                     Anti-retroviral; DP178-like; DP107-like;
                                                                                                                                                                                                                                                                                                 DP178-like/DP107-like peptide T-923.
                                                                                                                                                                                                                                                                                                                                                                                               AAU13342 standard; Peptide; 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DP107/DP178 complex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-442157/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jeffs P,
                                                                                                         WO200151673-A2
                                                                                                                                                      Modified-site
                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-JUL-1999;
                                                                         19-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AA;
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                                                                                                                                         /note= "C-terminal amide"
                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Erickson JB, Lawless MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 188; DB 22;
Pred. No. 2.5e-16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35
                                                                                                                                                                                                                                                                   transmembrane protein gp41;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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09-JUL-1999;

99US-0350841.

05-JUL-2000; 2000WO-US35727

(TRIM-) TRIMERIS INC

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to peptides which exhibit anti-retroviral cactivity. The peptides of the invention (AAUJ2559-AAUJ4009) comprise CD P178-like and DP107-like peptides. The DP178 peptide corresponds CC to amino acids 639-673 of the transmembrane protein gp41 from human CI immunodeficiency virus 1 (HIV-1) isolate LAI. The DP107 peptide CC corresponds to amino acids 558-595 of gp41 from HIV-1LAI. The invention also relates to a method of identifying compounds that inhibit the formation of or disrupts a DP107/DP178 complex. The method comprises detecting the formation of a DP107/DP178 complex, both in the presence of a test compound, in a reaction mixture containing DP107 CC and DP178 peptides. The method is useful for identifying compounds, including small molecule compounds, which may themselves exhibit cantifusogenic, antivitial or intracellular modulatory activity. The DP178-like/DP107-like peptides are useful to inhibit human and non-human retroviral, particularly HIV, transmission to uninfected cells. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                    Unidentified.
                                                                                                                                                                                                                                                                                   Core polypeptide; enhancer; antiviral; anti-HIV; virucide; hepatotropic; antiinflammatory; hybrid polypeptide; coiled-coil peptide interaction; fusion-related disorder; bacterial infection; viral infection.
               WPI; 2001-147136/15
                                               Barney S,
                                                                                (TRIM-) TRIMERIS INC
                                                                                                                  09-JUL-1999;
                                                                                                                                                   10-JUL-2000; 2000WO-US18772.
                                                                                                                                                                                     18-JAN-2001.
                                                                                                                                                                                                                    WO200103723-A1
                                                                                                                                                                                                                                                                                                                                                                      Core polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB77629 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present sequence represents one of the DP178-like/DP107-like peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 68; 259pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Identifying a compound that inhibits the formation of or disrupts a DP107/DP178 complex, especially compounds with antifusogenic, antivor intracellular modulatory activity, by detecting the formation of DP107/DP178 complex -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-442157/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                               Guthrie KI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                  99US-0350641
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                                               Merutka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 188; DB 22;
Pred. No. 2.5e-16;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΑA
                                               6
                                               Anwer MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lawless MK,
                                               Lambert DM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
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RESULT 12
AAB77789
В
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Best Local S
Matches 35
           New hybrid polypeptide, useful for preventing, treating and e.g. viral infections, comprises an enhancer peptide linked polypeptide -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        virus-cell fusion (e.g. viral infections caused by human immunodeficiency virus, respiratory syncytial virus, Epstein-Barr virus hepatitis B virus, Mason-Pfizer virus and pollo virus). Virus, hepatitis B virus, Mason-Pfizer virus and pollo virus). The enhancer peptide sequence increases the half-life and reduces the clearance rate of therapeutic peptides, which increases their efficacy and minimises the incidence and severity of adverse side effects. In addition, this increases the sensitivity of the diagnostic procedure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is a core polypeptide which may be linked to an enhancer peptide to form a novel hybrid polypeptide. The hybrid polypeptide exhibits enhanced pharmacokinetic properties relative to those exhibited by the core polypeptide when introduced into a living system. It is used to increase the in vitro or ex vivo half-life of the core polypeptide. The hybrid and core polypeptides can be used for modulating fusogenic events and intracellular processes involving coiled-coil peptide interactions. Other uses include preventing, treating and/or diagnosing disorders involving fusion events (e.g. modulation of neurotransmitter exchange and sperm-egg fusion) intracellular processes involving coiled-coil peptides (e.g. bacterial infections) and viral infections that involve cell-cell and/or
                                                                                                                                                                                                                                                                                                                                                                         Core polypeptide; enhancer; antiviral; anti-HIV; virucide; hepatotropic; antiinflammatory; hybrid polypeptide; coiled-coil peptide interaction; fusion-related disorder; bacterial infection; viral infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Core polypeptide T923.
                                                                                   WPI; 2001-147136/15
                                                                                                                                                                                              09-JUL-1999;
                                                                                                                                                                                                                                                                     18-JAN-2001.
                                                                                                                                                                                                                                                                                                      WO200103723-A1
                                                                                                                                                                                                                                                                                                                                          Unidentified.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB77789 standard; Peptide; 35 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New hybrid polypeptide, useful for preventing, treating and diagnosing e.g. viral infections, comprises an enhancer peptide linked to a core
                                                                                                                                                                                                                               10-JUL-2000; 2000WO-US18772.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                     s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           they are
                                                                                                                     Guthrie KI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                            9908-0350641
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                                                                                                                       Merutka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 188; DB 22;
Pred. No. 2.5e-16;
; Mismatches 0;
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                                                                                                                   Anwer MK,
                                                                                                                       Lambert DM
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                               diagnosing
to a core
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RESULT 13
AAB54934
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  those exhibited by the core polypeptide when introduced into a living C system. It is used to increase the in vitro or ex vivo half-life of the core polypeptide. The hybrid and core polypeptides can be used for colled-coil peptide interactions. Other uses include preventing, coiled-coil peptide interactions. Other uses include preventing, creating and/or diagnosing disorders involving fusion events (e.g. modulation of neurotransmitter exchange and sperm-egg fusion), intracellular processes involving coiled-coil peptides (e.g. bacterial infections) and viral infections that involve cell-cell and/or crius-cell fusion (e.g. viral infections caused by human than infections caused by human conficiency virus, Mason-Pfizer virus and polio virus). The enhancer peptide sequence increases the half-life and reduces the collearance rate of therapeutic peptides, which increases their efficacy collearance rate of therapeutic peptides, which increases their efficacy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                  A modified peptide and a reactive group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds useful for treatment of viral infections, e.g.
                                                                                                                                                     WPI;
                                                                                                                                                                                    Bridon DP, Dufresne RP,
                                                                                                                                                                                                                                                               17-MAY-1999;
10-SEP-1999;
                                                                                                                                                                                                                                                                                                                    17-MAY-2000; 2000WO-US13651
                                                                                                                                                                                                                                                                                                                                                             23-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                               WO200069902-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       simian immunodeficiency virus; human parainfluenza virus; HPIV; RSV;
human respiratory syncytial virus; human immunodeficiency virus; HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Long lasting fusion peptide inhibitor; viral infection; antiviral; antifusogenic; mobile blood component; measles virus; MeV; SIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anti-HIV peptide DP178 amino truncation peptide #32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB54934;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB54934 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   In addition, this in which they are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       In addition, this
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is a core polypeptide which may be linked to an enhancer peptide to form a novel hybrid polypeptide. The hybrid polypeptide exhibits enhanced pharmacokinetic properties relative to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                          (CONJ-) CONJUCHEM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ocal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                 2001-007496/01.
                                                        immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             In 100.0%; Similarity 100.0%; 35; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 48; 151pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                             99US-0134406
99US-0153406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   incidence and severity of adverse side effects. increases the sensitivity of the diagnostic pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       used.
                                                                                                                                                                                      Boudjellab N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 188; DB 22;
Pred. No. 2.5e-16;
Mismatches 0;
                                                                                                                                                                                    Robitaille M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                      Milner
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Gaps

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Disclosure;

Page 135;

211pp; English

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synthetic

peptides -

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inhibitors

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SO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       reduce the level of membrane fusion events between two or more entities, c. e.g., virus-cell or cell-cell, relative to the level of membrane fusion that occurs in the absence of the peptide. (I) is useful in the treatment of patients who are suffering from viral infection, e.g. HIV, RSV, HPIV, MeV, and SIV. (I) may be administered prophylactically to previously uninfected individuals. This is useful in cases where an individual has been subjected to a high risk of exposure to a virus. By bonding of long-lived components of the blood, such as immunoglobin, serum albumin, red blood cells and platelets the activity is extended for days to weeks. This is due to improved stability in vivo and a reduced susceptibility to peptidase or protease degradation. This minimises the need for more frequent, or even continual, administration of the peptides. AAB54784 to AAB55431 represent peptides used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds. (I) has anti-viral and anti-fusogenic activities. (I) inhibits viral infection of cells by inhibiting cell-cell fusion or free virus infection or to reduce the level of membrane fusion events between two or more entities
                                                                                    Barney SO,
                                                                                                                                                             07-JUN-1993;
                                                                                                                                                                                                 07-JUN-1994;
                                                                                                                                                                                                                                     22-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DP-178 derived from HTV-1 isolate LAI has antiviral activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR64364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a modified anti-viral peptide (I) comprising a peptide that exhibits anti-viral activity and a reactive
                                  WPI; 1995-036105/05
                                                                    Petteway
                                                                                                                                                                                                                                                                        W09428920-A
                                                                                                                                                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                          Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR64364 standard; Peptide;
                                                                                                                        (UYDU-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immunodeficiency virus; transmembrane protein; gp41;
helix; leucine zipper; DP-185.
                                                                    SR,
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S
                                                                                      Bolognesi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                    Wild
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΑĀ,
                                                                                                                                                             93US-0073028
                                                                                                                                                                                                 94WO-US05739
                                                                                                                                                                                                                                                                                                                                                 38
                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                            /note=
                                                                                                                                                                                                                                                                                                                                                                                                     /note=
                                                                    CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                        DP,
                                                                                                                                                                                                                                                                                                         "optionally has a carboxyl, amido, hydrophobic
or macromolecular carrier gp. attached"
                                                                                                                                                                                                                                                                                                                                                          \label{eq:constraints} 9\text{-}fluorenyl\text{methoxy-carbonyl, hydrophobic}\\ \text{macromolecular carrier } gp.\ \text{attached"}
                                                                                                                                                                                                                                                                                                                                                                                                     "optionally has an amino, acetyl,
                                                                                      Lambert DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 188; DB 22;
Pred. No. 2.5e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                      Matthews
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35
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                                                                                        IJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35;
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Claim 11;

Page 132;

182pp; English

HIV transmission

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RESULT 15
AAR98398
XCCCCCCXX PYTT PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ARR64364 is designated DP-178, and corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein-protein interactions, and possess anti-viral activity. Homologues of these peptides were identified by a computer assisted peptide sequence search. The peptides inhibits transmission to uninfected cells, and can also be used as type and/or subtype specific
                                           The sequences given in AAR98398-408 represent peptides which exhibit antifusogenic activity, antiviral capability and/or the ability to modulate intracellular processes involving coiled-coil peptide structures. These peptides are recognised by the ALLMOTI5, 107x178x4 and PLZIP search motifs. These peptides may be used to
                                                                                                                                                                              Inhibiting viral transmission, e.g. HIV or RSV, to a cell - using an isolated peptide recognised by an ALLMOTI5, 107x178x4 or PLZIP sequence search motif
               inhibit th hepatitis
                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                              WPI; 1996-309517/31.
                                                                                                                                                                                                                                                                             Barney SO,
Matthews TJ,
                                                                                                                                                                                                                                                                                                                                                                          06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                           20-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9619495-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antifusogenic activity; antiviral capability; coiled-coil peptide; ALLMOTI5; 107x178x4; PLZIP search motif; viral transmission; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DP178 corresponds to residues 638-673 of HIV-1(LAI) gp41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR98398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR98398 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diagnostic tools.
                                                                                                                                                                                                                                                                                                                            (TRIM-) TRIMERIS INC. (UYDU-) UNIV DUKE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        influenza virus; hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  al Similarity
35; Conserv
               the transmission of a virus, is B virus, to a cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36 AA;
                                                                                                                                              Fig 1; 471pp; English.
                                                                                                                                                                                                                                                                             Bolognesi DP,
, Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                           95US-0470896.
94US-0360107.
                                                                                                                                                                                                                                                                                                                                                                                                                            95WO-US16733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                              Lambert DM, Wild CT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 188; DB 16;
Pred. No. 2.6e-16;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A
                                These peptides may be used to pref. HIV, influenza virus,
                                                                                                                                                                                                                                                                                               Langlois AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                   or
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Best Local :
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1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 35
                                1 Similarity
35; Conserv
                                                                36
                                 Conservative
                                                                AA;
                                        100.0%;
                                 0;
                                       Score 188; DB 17;
Pred. No. 2.6e-16;
                                 Mismatches
                                  Indels
                                                Length
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Search co Job time completed: May 16, me : 32.5562 secs 2003, 11:12:03

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Minimum DB
Maximum DB
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Maximum Match 100%
Listing first 45 s
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run on:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               al number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seq
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length: 2000000000
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-623-533A-117
188
1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 May 16, 2003, 11:04:54; Search time 11.8072 Seconds (without alignments) 284.970 Million cell updates/sec
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Gapop 10.0 , Gapext 0.5
        283224 seqs, 96134422 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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pir2:*
pir3:*
pir4:*
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    $33985

$13288

VCLJUY

C4L511

VCLJVL

VCLJVL

VCLJSW

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RESULT VCLJH3

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env polyprotein pred
N;Alternate names: d
C;Species: human imm
A;Note: host Homo sa
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C; Species: h
A; Note: host
   C41621
env polyprotein
N;Alternate name
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F;88,136,141,146,161,165,191,202,239,246,267,281,294,300,
F;616,621,630,642,679,755,821/Binding site: carbohydrate
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C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
C;Accession: A03973
                                                                                                                Вр
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nberger, J.A.; Papas, T.S.
Nature 313, 277-284, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: A; Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Title: Nucleotide sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTITA
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C;Genetics:
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A; Residues: 1-856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Title: Complete nucleotide sequence of the AIDS virus, A; Reference number: A93353; MUID:85111123; PMID:2578615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Gene: env
                                                                                                                                                                                                                                                                                                                              Superfamily: type E retrovirus env polyprotein; Reywords: AIDS; capsid protein; coat protein; glycoprotein; 1-30/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1-511/Product: exterior membrane glycoprotein #status predicted <EXT>
1-585/Product: transmembrane glycoprotein #status predicted <TMN>
12-885/Product: transmembrane glycoprotein #status predicted <TMN>
188,135,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,406
161,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status predic
                                                                                                                                                                                                         Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wain-Hobson, S.; :
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Best Local
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                                                                                                                                                                                                                                                                                                                  31-516/Product: exterior membrane glycoprotein #status predicted
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Domain: signal sequence #status predicted <SIG>
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                                                                                                                TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 678
                                                                                                                                                TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                      human
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     polyprotein
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                   immunodeficiency virus
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                                                                                                                                                                                                        Score 188;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cole,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PMID: 2981635
                                                                                                                                                                                                                                                                                                                                                                                                                               PIDN: AAB59751.1;
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.2e-14;
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                      type
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                                                                                                                                                                                                                       Length 861;
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Gallo, R.C.;
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                    (fragment)
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                                                                                                                                                                                                                                                             (Asn) (covalent)
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                                                                                                                                                                                                                                                                                                                                                                                                                             PID:g326424
                                                                                                                                                                                                                                                                                                                                                   immunodeficiency;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-Jul-1999
                                                                                                                                                                                     0;
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C; Date:
C; Access
N;Contains: coat protein gp120; coat protein gp41
C;Species: human immunodeficiency virus type 1, HI
C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1988
                                                                                                                                                    B
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                                                         env polyprotein precursor -
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                                                                                               RESULT 7
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A;Gene: env C;Superfamily: type E retrovirus env polyprotein (C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; polyp C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp F;1-30/Domain: signal sequence #status predicted <SIG> F;31-511/Product: exterior membrane glycoprotein #status predicted <EXT> F;512-856/Product: transmembrane glycoprotein #status predicted <TMM> F;512-856/Product: transmembrane glycoprotein #status predicted <TMM> F;813-5141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397, F;611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre
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C;Species: hu
A;Note: host
C;Date: 11-Fe
C;Accession: (
R;Burger, H.;
Proc. Natl. A)
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A,Note: this virus was isolated from the mother's sexual partner
C;Genetics:
A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; polyp
E;1-251/Product: coat protein gp120 (fragment) #status predicted <GP1>
E;1-251/Product: coat protein gp41 (fragment) #status predicted <GP1>
E;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2>
E;424-443/Product: transmembrane #status predicted <TMN>
E;424-443/Product: transmembrane #status predicted <TMN>
C;424-443/Product: coat protein gp41 (fragment) #status predicted <TMN>
E;424-443/Product: transmembrane #status predicted <TMN>
E;424-443/Product: coat protein gp41 (fragment) #status predicted <TMN>
E;424-443/Productic coat protein gp41 (fragment) #status predicted <TMN>
E;424-443/Product
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C; Genetics:
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A; Residues: 1-856 < M
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A; Reference number: A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N;Alternate names: coat polyprotein C;Species: human immunodeficiency virus
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A; Residues: 1-443 <B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R; Muesing, M.A.; Smith, Nature 313, 450-458, 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Title: Evolution of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      env polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            :Note: host Homo sapiens (man)
:Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change
                                                                                                                                         Matches
                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Accession: A03974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
   639
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                                                                 1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 TSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     host Homo sapiens (man)
TSLIHSLIEESQNQQEKNEQELLELDKWANLWNW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1-443 <BUR>
                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      precursor - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <MUE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GB:K02083; NID:g555008;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A93355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          structure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           D.H.; Cabradilla, C.D.; Benton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95.2%;
94.3%;
                                                                                                                                                                      95.2%;
97.1%;
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S.A. 88, 11236-11240, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MUID:92107924; PMID:1763038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dure and expression of the MUID:85111157; PMID:29821
                                                                                                                                                                      Score 179;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 179; DB 2
Pred. No. 7e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunodeficiency virus
                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PMID:2982104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIDN:AAB59873.1;
   672
                                                                    ω
4
                                                                                                                                                                                                          DB 1;
                                                                                                                                                                          .5e-13;
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                                                                                                                                                                                                   Length 856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human
                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C.V.; Lasky, L.A.; Capon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of coat protein gp120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AIDS/lymphadenopathy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PID: g328559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-Jul-1999
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                                                                                                                                      0;
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human

immunodeficiency virus

type

1 (isolate WMJ1)

HIV-1

#text_change

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A; Note: host Homo sapiens (man)
C; Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-1997
C; Accession: B28922
R; Gurgo, C.; Guo, H.G.; Franchini, G.; Aldovini, A.; Collalti, E.; Farrell, Virology 164, 531-36, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Gene:
C; Superf
                                                                                                                                                        envelope protein gp120/gp41 - human immunodeficiency virus C;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 27B C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_ch C;Accession: S21994; S70421 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; Hacke submitted to the EMBL Data Library, July 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Superfamily: type E retrovirus env polyprotein C;Reywords: coat protein; glycoprotein; polyprotein; transmembrane F;1-29/Domain: signal sequence #status predicted <SIG> F;30-501/Product: coat protein gp120 #status predicted <GP1> F;502-847/Product: coat protein gp41 #status predicted <GP2> F;87,134,140,151,155,183,197,234,241,262,276,289,295,331,338,354,36
         A; Molecule 1
A; Residues:
                                                                                              A;Description: Distinct populations A;Reference number: S21990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Title: Envelope sequences A; Reference number: A28922;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
VCLJSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Title: Identification and characterization of conserved A;Reference number: A24774; MUID:86218077; PMID:2423250 A;Accession: A24774
                                                                 A; Accession: S21994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-861 <GUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-856 <STA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Gene: env
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N;Alternate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;Superfamily: type E retrovirus env polyprotein
;Keywords: capsid protein; coat protein; glycoprotein; polyprotein; transmembrane prote
;1-29/Domain: signal sequence #status predicted <SIG>
30-861/Product: env polyprotein #status predicted <EPP>
7,129,135,140,143,159,163,187,198,234,241,262,276,295,301,302,333,340,356,362,386,396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 678
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type: DNA
: 1-357 <STE1>
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s: coat polyprotein
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94.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of two new United States HIV-1 MUID:88219542; PMID:3369091
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 179;
Pred. No. 1
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Pred. No. 1
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of H
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                                                                                                                           in blood and cerebrospinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
..5e-13;
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                                                                                                                                                                                         Hacke,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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A; Experimental source: A; Note: submitted to the state of the state o
                                                                                    A; Molecule type: DNA
A; Residues: 1-357 <ST2>
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C;Superfamily: type
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                                                          A;Cross-references: EMBL:X61356; NID:g60181; PIDN:CAA43624.1;
                                                                                                                                                     A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                               C; Accession: S70422;
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Best Local :
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AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A; Title: Distinct populations of human immunodeficiency A; Reference number: S70417; MUID:92144209; PMID:1736940 A; Accession: S70422
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               envelope protein gp120/gp41 - human immu c/species: human immunodeficiency virus A;Variety: isolate 28
C;Date: 20-Feb-1995 #sequence_revision 2
C;Accession: S21998; S70425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A:Residues: 1-140,'X',142-312,'X',314-357 <STE2>A:Cross-references: EMBL:X61355; NID:g60179 C:Superfamily: type E retrovirus env polyproteir
                                                                                                                      envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patient C;Species: human immunodeficiency virus type 1, HTV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
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A; Residues: 1-358 <STE1>
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32; Conserv
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                                                                                     Storch-Hagenlocher,
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91.4%;
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91.4%;
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Pred. No. 1
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                                                                                   B.; Wildemann,
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trus type 1, HIV-1
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Data

PID:g1067129

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N;Contains: amino end of coat protein gp41; carboxyl end of coat protein gp1
C;Species: human immunodeficiency virus type 1, HIV-1
A;Note: host human immunodeficiency virus type 1, HIV-1
C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999
C;Accession: A41621
R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, P.N.; Gibbs, R.A.
                                                                        N;Alternate names: coat polyprotein N;Contains: amino end of coat protein gp41; carboxyl end C;Species: human immunodeficiency virus type 1, HIV-1
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A;Title: HIV-1 tropism for mononuclear pareference number: S13288; MUID:9104304 ccession: S13289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      env protein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997
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C;Superfamily:
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R;Pang, S.; Vinters, H.V.; Akashi, T.; O'Brien, W.A.; Chen, R:Pang, S. to the EMBL Data Library, July 1996
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C;Accession: S13289
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A; Residues: 1-847 < PAN>
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A:Reference number: Z16673
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Residues: 1-847 <OBR>
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91.4%;
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91.4%;
                                                                                                                                                                                                                                                                                                                                                       91.5%;
91.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mononuclear phagocytes can be; MUID:91043044; PMID:2172833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        env polyprotein
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Pred. No. 1.7e-13;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                       Score 172; DB 2; Pred. No. 9.9e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 172; DB 2;
Pred. No. 9.9e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A.; Zhao, J.Q.; Diagne, A.; Idler, K.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HIV-1
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                                                                                                                                                                                                                                                                                                                                                                          Length 847;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 357;
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                                                                                                      of coat protein gp120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          determined
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24 - Nov - 1999
                                                                                                                                                                                                                                                                                                                                 0
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                                                                                                                                                                                                          Search completed: May 16, Job time: 11.8072 secs
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A; Molecule type: DNA
A; Residues: 1-358 <TEL>
A; Cross-references: EMBL:X61352; NID:g60186; PIDN:CAA43616.1;
A; Cross-references: EMBL:X61352; NID:g60186; PIDN:CAA43616.1;
A; Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.
AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A; Title: Distinct populations of human immunodeficiency virus A; Reference number: S70417; MUID:92144209; PMID:1736940
A; Accession: S70418
A; Status: preliminary
A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C:Species: human immunodeficiency virus A; Variety: isolate 3L C:Date: 20-Feb-1995 #sequence_revision C:Accession: $22002; $70418 R:Steuler, H.; Storch-Hagenlocher, B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Superfamily: type E
C; Keywords: AIDS; caps
F; 1-253/Product: coat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Superfamily: type E retrovirus env polyprotein
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp
F;1-253/Product: coat protein gp120 (fragment) #status predicted <GP1>
F;254-445/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;426-445/Domain: transmembrane #status predicted <TMN>
F;9,23,42,48,78,85,101,107,131,137,143,147,152,155,190,205,353,358,367,379/Binding si
                                                                                                                                                                                        A;Cross-references:
C;Superfamily: type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Reference number: A; Accession: S22002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data Library, July 1991
A:Description: Distinct populations of HIV-1 in blood and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
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A;Title: Evolution of human immunodeficiency virus type 1 nucleotide sequence diversi
A;Reference number: A41621; MUID:92107924; PMID:1763038
    DЪ
                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-333, 'X', 335-358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             envelope protein gpl20/gp41 - human immunodeficiency virus type C;
Species: human immunodeficiency virus type 1, HIV-1 \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:M77228; NID:g328627; PIDN:AAB03790.1; A;Note: this virus was isolated from the mother
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31; Conservative
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Pred. No. 6.4e-13;
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J. Biol. Chem. 265:10373-10382(1990).
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MEDLINE=87299196; PubMed=3040055;
Ratner L., Fisher A., Jagodzinski
Gallo R.C., Wong-Staal F.;
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
                                                                                                                                                                                                                                         use by non-profit institutions as long modified and this statement is not removed entities requires a license agreement (See
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                                                                                                                                                                                                                                                                                                               "HTLV-III env gene products synthesized in antibodies present in the sera of AIDS pat. Cell 41:979-986(1985).
                                                                                                                                                                                                                                                                                                                                            MEDLINE=85228248; PubMed=2988795;
Crowl R., Ganguly K., Gordon M., Cor
Shaw G.M., Wong-Staal F., Reddy E.P.
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                                                                                                                                                                                                                               or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                        the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                Viruses; Retroid
NCBI_TaxID=11707;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Envelope
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996 (Rel. 33, Last sequence update)
999 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains:
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EMBL; U12055; GlycoSuiteDB; InterPro; IPR0
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15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior |
9.1/2. Sequence of the procursor of the procurs
                                                                            entities
or send a
                                                                                                                                                                                                                                                                              Reitz M.S. Jr., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.M., Shaw G.M., Kong L.I., Weiss S.H., Waters D., Gallo R.C., Blattner W.; "Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB)."; AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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                        AAA76690.1; -. Q70626; -.
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                                             ENV_HV1BR STANDARD; PRT; 861 AA. P03377; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) Envelope polyprotein GP160 precursor (Contains: 91ycoprotein (GP120); Transmembrane 91ycoprotein
                    Human immunodeficiency virus
Viruses; Retroid viruses; Ret
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         NCBI_TaxID=11686;
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EMBL; A04321; CAA00352
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HIV; K02013; ENV$BRU.
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InterPro; IPR000777; GP120.
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"Nucleotide sequence of the AIDS virus,
Cell 40:9-17(1985).
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01-FEB-1991
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InterPro; IPR000777; GP120.
Pfam; PP005516; GP120: 1.
Pfam; PP00517; GP41; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV; M33943; ENV$MFA.
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polyprotein GP160 precursor [Contains:
tein (GP120); Transmembrane glycoprotein
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RESULT 8
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T 21-JUL-1986 (Rel. 01, Last sequent 15-JUL-1999 (Rel. 38, Last annotate Envelope polyprotein GP160 precurglycoprotein (GP120).
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                                                                                         Pfam; PF00516; GP120;
Pfam; PF00517; GP41;
AIDS; Coat protein; Po
                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                     EMBL; K02083; AAB59873.1; -
EMBL; X01762; CAA25903.1; ALT_SEO.
PIR; A03974; VCLTVL.
HIV; K02083; ENV$PV22.
                                                                                                                                                                                                                                                        "Nucleic acid structure a AIDS/lymphadenopathy retr. Nature 313:450-458(1985).
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NCBI_TaxID=11700;
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InterPro; IPR000777; GP120.
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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
glycoprotein (GP120); Transmembrane
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MEDLINE-88219542; PubMed-3369091;
Gurgo C., Guo H.-G., Franchini G., Aldovini A.,
Frarrell K., Wong-Staal F., Gallo R.C., Reitz M.S.
"Envelope sequences of two new United States HIV
Virology 164:531-536(1988).
-i- MISCELLANEOUS: THE SC ISOLATE WAS TAKEN FROM
                          This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict
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NCBI_TaxID=11702;
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Pfam; PF00517; GP41; 1.
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license@isb-sib.ch).
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BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A WAS PERINATALLY INFECTED BY HER MOTHER. PIR; A24774; VCLJ3W.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus type 1 (WMJ1 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=31678;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=86218077; PubMed=2423250;
Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D.,
Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., I
"Identification and characterization of conserved a
regions in the envelope gene of HTLV-III/LAV, the large "."
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15-JUL-1999 (Rel.
Envelope polyprote
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999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains: E
tein (GP120); Transmembrane glycoprotein
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Score 179; DE Pred. No. 2.462; Mismatches

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Length 856;

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the European Bioinformatics Institute. The
use by non-profit institutions as long
modified and this statement is not removed.
entities requires a license agreement (See
or send an email to license@isb-sib.ch).
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J. Virol. 64:4016-4020(1990).
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Viruses; Retroid viruses;
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IPR000777; GP120.
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GP160 precursor [Contains: Exterior membrane
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EXTERIOR MEMBRANE GLYCOPROTEIN.

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Envelope polyprotein GP160 precursor [Contains:
glycoprotein (GP120): Transmembrane alucon
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Science 232:1548-1553(1986).
-!- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A WAS PERINATALLY INFECTED BY HER MOTHER.
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                                    EMBL; M12507; AAB12990.1; -.
HIV; M12507; ENV$WMJ2.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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G.M., Taylor M.E., Redfield F
Wong-Staal F., Gallo R.C., F
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01-OCT-1989 (Rel. 12, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Eglycoprotein (GP120); Transmembrane glycoprotein
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P12489;
                                              SEQUENCE FROM N.A.

MEDLINE=89352108; PubMed=2669897;

Komiyama N., Hattori N., Inoue J., Sakuma S.

Komiyama N., Hattori N., Inoue J., Sakuma S.

"Nucleotide sequences of gag and env genes o.

HIV-1 and their expression in bacteria.";

AIDS Res. Hum. Retroviruses 5:411-419(1989).
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NCBI_TaxID=11694;
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es; Retroviridae; Lentivirus.
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TRANSMEMBRANE GLYCOPROTEIN.

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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior |
91ycoprotein (GP120); Transmembrane glycoprotein (GP41)].
ENV.
                                                                          CARBOHYD
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-1- MISCELLANEOUS: THE MN ISOLATE WAS TAKEN FROM A PEDIATRIC PATIENT IN 1984.
                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
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InterPro; IPR000777; (
Pfam; PF00516; GP120;
Pfam; PF00517; GP41; ]
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HIV; M17449;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
    ENVSMN
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; GP120.
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                                                                                                                                                                                                                                                                                                                               EXTERIOR MEMBRANE GLYCOPROTEIN.

TRANSMEMBRANE GLYCOPROTEIN.

BY SIMILARITY.

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RESULT 5
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F;1-29/Domain: signal sequence #status predicted <SIG>
F;30-501/Product: coat protein gp120 #status predicted <GP1>
F;502-847/Product: coat protein gp41 #status predicted <GP2>
F;87,134,140,151,155,183,197,234,241,262,276,289,295,331,338,354,360,390,394,404,447,459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      env polyprotein precursor - human immunodeficiency virus type 1 (isolate WMJ1) %Contains: coat protein gp120; coat protein gp121 C:Species: human immunodeficiency virus type 1, HIV-1 C:Species: human immunodeficiency virus type 1, HIV-1 C:Date: 30-Sep-1988 #sequence_revision 30-Sep-1988 #text_change 07-Nov-1997
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C;Keywords: coat
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                                                                                                                                                                                                                                                                                                  Accession: T01672
                                                                                                                                                                                                                                                                                                                                                                         Alizon, M.; Wain-Hobson, S.; Gluckman, J.C.;
                                                                                                                                                                                                                                                                                                                                                                                          velope polyprotein precursor - human immunodeficiency virus typecies: human immunodeficiency virus type 1, HIV-1
Ate: 19-Feb-1999 #sequence_revision 19-Feb-1999 #text_change Accession: T01672
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Best Local
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Pred. No. 3.9e-14;
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                                                                                                                                                           Score 180; DB 2;
Pred. No. 1.6e-13
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A; Molecule type: DNA
A; Residues: 1-861 <G
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A; Gene: env

C; Superfamily: type E retrovirus env polyprotein
C; Superfamily: type E retrovirus env polyprotein; glycoprotein; immunode
C; Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunode
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-855/Product: env polyprotein #status predicted <MAT>
F;20-800/Product: env polyprotein #status predicted <EX
F;20-800/Product: transmembrane glycoprotein #status predicted <TMM>
F;501-855/Product: transmembrane glycoprotein #status pred
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                                                                                                                                                 A:Note: host Homo sapiens (man)
C:Date: 31-Dec-1990 #sequence_revision
C:Accession: B28922
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C;Accession: D26192
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: genomic A; Residues: 1-853 <THE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data A; Reference number: S54377
                                                        R;Gurgo, C.; Guo, H.G.; Fran
Virology 164, 531-536, 1988
A;Title: Envelope sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gene 52, 71-82, 1987 A;Title: Molecular characterization of human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R; Srinivasan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: EMBL:M22639;
C;Superfamily: type E retrovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: S54384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: A26192;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    env polyprotein
A; Reference number: A; Accession: B28922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: GB:K03458; GB:M16322; NID:g329398; PIDN:AAA45380.1; PID:g329403
                                                                                                                                                                                                                                                                                  N;Alternate names: coat polyprotein
                                                                                                                                                                                                                                                                                                             env polyprotein precursor - human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                           Species: human immunodeficiency virus type 1, HTV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   YTGLIYRLIEESQTQQEKNEQELLELDKWASLWNWF 670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YTGLIYRLIEESQTQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     type: DNA: 1-855 <S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   names: coat polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D26192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             precursor - human
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                                 A28922;
                                                                                                                          Franchini,
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86.1%;
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                                 of two new United MUID:88219542; PM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 179; DB 1
Pred. No. 2e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunodeficiency
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Pred. No.
                                                                                                                             G.;
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                                                                                                                             Aldovini,
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                                                                                                                             Α.,
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                                                                                                                             Collalti,
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                                                                                                                                                                                                                                                                                                                    type
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                                                                                                                             E.; Farrell,
                                                                                                                                                                                            16-Feb-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 355, 386, 392, 398,
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Result
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Maximum DB seq length: 2000000000
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                    il number of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
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Gapop 10.0 , Gapext 0.5
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                283224 seqs, 96134422 residues
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C41621 env polyprotein P - human immunodeficiency virus type 1 (fragment) N;Alternate names: coat polyprotein N;Contains: amino end of coat protein gp41; carboxyl end of coat protein C;Species: human immunodeficiency virus type 1, HIV-1 A;Note: host Homo sapiens (man) C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Alg-1: C;Accession: C41621 R;Burger, H; Welser, B; Flaherty, K; Gulla, J; Nguyen, P.N.: Gibbs, I R;Burger, H; Welser, B; Flaherty, K; Gulla, J; Nguyen, P.N.: Gibbs, I A;Title: Evolution of human immunodeficiency virus type 1 nucleotide A;Reference number: A41621; MUID:92107924; PMID:1763038 A;Accession: C41621 A;Molecule type: DNA A;Residues: 1-443 <burn #status="" (fragment)="" <gpl="" a;cross-references:="" a;gene:="" a;note:="" aids;="" c;genetics:="" c;keywords:="" c;superfamily:="" capsid="" coat="" e="" env="" f;1-551="" from="" gb:m77230;="" glycoprotein;="" gp41="" immunodefic="" isolated="" mother's="" nid:9328631;="" partner="" pid:9555015="" pidn:aab03792.1;="" polyprotein="" predicted="" product:="" protein="" protein;="" retrovirus="" sexual="" the="" this="" type="" virus="" was="">F;252-443/Product: coat protein gp41 (fragment) #status predicted <gpl>F;252-443/Product: coat protein gp41 (fragment) #status predicted <gpl>F;252-443/Product: coat protein gp41 (fragment) #status predicted <gpl>F;252-443/Product: coat protein gp41 (fragment) #status predicted <gpl>F;255-443/Product: /gpl></gpl></gpl></gpl></gpl></gpl></gpl></gpl></gpl></gpl></gpl></gpl></gpl></gpl></burn>	RESULT 1 \$21996 envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patie C:Species: human immunodeficiency virus type 1, HIV-1 C:Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1 C:Date: 20-Feb-1995 #sext_change 26-Aug-1 C:Date: 20-Feb	ALIGNMENTS	30 168 84.0 852 2 T12016 envelope glycological statements of the control of the c
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CCCCCCX PXT PTX XX

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The present sequence is a core polypeptide which may be linked to CC an enhancer peptide to form a novel hybrid polypeptide. The hybrid CC polypeptide exhibits enhanced pharmacokinetic properties relative to CC those exhibited by the core polypeptide when introduced into a living CC system. It is used to increase the in vitro or ex vivo half-life of CC the core polypeptide. The hybrid and core polypeptides can be used for CC modulating fusogenic events and intracellular processes involving CC treating and/or diagnosing disorders involving fusion events (e.g. modulation of neurotransmitter exchange and sperm-egg fusion), intracellular processes involving coiled-coil peptides (e.g. bacterial infections) and viral infections that involve cell-cell and/or CC virus-cell fusion (e.g. virus, respiratory syncytial virus, Epstein-Barr CC virus, hepatitis B virus, Mason-Pfizer virus and polio virus). CC The enhancer peptide sequence increases the half-life and reduces the clearance rate of therapeutic peptides, which increases their efficacy can dminimises the incidence and severity of adverse side effects.
                                                                                                             Query Match
Best Local Similarity
Matches 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New hybrid polypeptide, useful for preventing, treating and diagnosing e.g. viral infections, comprises an enhancer peptide linked to a core polypeptide -
                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 58; 151pp; English.
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                                                                                                                                                                                                                                                                                                               in which they are used.
1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
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                                                                                                                                                                                                                                                        36 AA;
                                                                                                                          Conservative
                                                                                                                       100.0%; S
100.0%; P
ative 0;
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                                                                                                                       Score 200; DB 22;
Pred. No. 5.5e-18;
Mismatches 0;
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                                                                                                                                                                                    Length 36;
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AAB78239
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Best Local S
Matches 36
                                                                                                                                                                                                                                                       SULT 14
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10-SEP-1999;
15-OCT-1999;
                                                                                                              Core polypeptide; enhancer; antiviral; anti-HIV;
virucide; hepatotropic; antiinflammatory; hybrid polypeptide;
coiled-coil peptide interaction; fusion-related disorder;
          10-JUL-2000; 2000WO-US18772.
                                  18-JAN-2001
                                                        WO200103723-A1
                                                                               Unidentified.
                                                                                                     coiled-coil peptide interaction;
bacterial infection; viral infect
                                                                                                                                                             Core polypeptide T1407.
                                                                                                                                                                                     19-APR-2001
                                                                                                                                                                                                            AAB78239;
                                                                                                                                                                                                                                 AAB78239 standard; Peptide; 36 AA
                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                        intracellular uptake and interference with physiological processes. AAB90829 to AAB92441 represent peptides which can be used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 662-663; 733pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Modifying and attaching therapeutic peptides peptidase degradation, useful for increasing
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nes 36; Conserv
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99US-0153406.
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Pred. No. 5.5e-18;
Mismatches 0;
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virus-cell fusion (e.g. viral infections caused by human immunodeficiency virus, respiratory syncytial virus, Epstein-Barrvirus, hepatitis B virus, Mason-Pfizer virus and polio virus). The enhancer peptide sequence increases the half-life and reduces the clearance rate of therapeutic peptides, which increases their efficacy and minimises the incidence and severity of adverse side effects. In addition, this increases the sensitivity of the diagnostic procedure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is a core polypeptide which may be linked to an enhancer peptide to form a novel hybrid polypeptide. The hybrid polypeptide exhibits enhanced pharmacokinetic properties relative to those exhibited by the core polypeptide when introduced into a living system. It is used to increase the in vitro or ex vivo half-life of the core polypeptide. The hybrid and core polypeptides can be used for modulating fusogenic events and intracellular processes involving coiled-coil peptide interactions. Other uses include preventing, treating and for diagnostic discrete includes process.
                                                                                                                                                                                                                                                                                                                                              Core polypeptide; enhancer; antiviral; anti-HIV; virucide; hepatotropio; antiinflammatory; hybrid polypeptide; coiled-coil peptide interaction; fusion-related disorder; bacterial infection; viral infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Core polypeptide T1408.
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(TRIM-) TRIMERIS INC
                                                                                                               10-JUL-2000; 2000WO-US18772.
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e.g. viral infections,
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36; Conserv
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                                                         9908-0350641
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Pred. No. 5.5e-18;
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to a core
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RESULT 12
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                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to peptides which exhibit anti-retroviral cactivity. The peptides of the invention (AAU12559-AAU14009) comprise DP178-like and DP107-like peptides. The DP178 peptide corresponds to amino acids 639-673 of the transmembrane protein gp41 from human immunodeficiency virus 1 (HIV-1) isolate LAI. The DP107 peptide corresponds to amino acids 558-595 of gp41 from HIV-LIAI. The invention also relates to a method of identifying compounds that inhibit the formation of or disrupts a DP107/DP178 complex. The method comprises detecting the formation of a DP107/DP178 complex, both in the presence or absence of a test compound, in a reaction mixture containing DP107 and DP178 peptides. The method is useful for identifying compounds. Cantifusogenic, antiviral or intracellular modulatory activity. The DP178-like/DP107-like peptides are useful to inhibit human and non-human retroviral, particularly HIV, transmission to uninfected cells. The
                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                      Best Local
                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identifying a compound that inhibits the formation of or disrupts a DPIO7/DPI78 complex, especially compounds with antifusogenic, antiviral or intracellular modulatory activity, by detecting the formation of a DPIO7/DPI78 complex
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TRIM-) TRIMERIS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 77; 259pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus 1 isolate LAI:
                                                                                                                                                                                                                                                                                                                                                  present sequence represents one of the DP178-like/DP107-like peptides of the invention.
              DP178 homologue
                                              21-NOV-2001
                                                                                                                                                                                                                                                                                                                    Sequence
                                                                           AAU14013
                                                                                                           AAU14013 standard;
                                                                                                                                                                                     1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                    36 AA;
                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US35727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antiviral; HIV transmission; mutant; mutein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0350841
                derived from
                                                                                                           peptide;
                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Erickson
                                                                                                           36
                                                                                                                                                                                                                                                     0;
                HIV-1 isolate
                                                                                                                                                                                                                                                    Score 200; DB 22;
Pred. No. 5.5e-18;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JB,
                                                                                                            A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lawless
                RF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Merutka
                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                      36;
                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                     Gaps
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RESULT 13
AAB92246
ID AAB92
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PX SSX KK X EX TX C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to peptides which exhibit anti-retroviral cativity. The peptides of the invention (AAU12559-AAU14009) comprise CC DP178-like and DP107-like peptides. The DP178 peptide corresponds CC to amino acids 639-673 of the transmembrane protein gp41 from human CC immunodeficiency virus 1 (HIV-1) isolate LAI. The DP107 peptide corresponds to amino acids 558-595 of gp41 from HIV-LAI. The invention CC corresponds to amethod of identifying compounds that inhibit the CC corresponds to a method of identifying compounds that inhibit the CC corresponds to a method of a DP107/DP178 complex. The method comprises CC detecting the formation of a DP107/DP178 complex, both in the presence CC or absence of a test compound, in a reaction mixture containing DP107 CC and DP178 peptides. The method is useful for identifying compounds, CC including small molecule compounds, which may themselves exhibit CC antifusogenic, antiviral or intracellular modulatory activity. The CC including small molecule compounds, which may themselves exhibit CC including the peptides are useful to inhibit human and non-human CC present sequence represents a DP178 homologue derived from
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Identifying a compound that inhibits the formation of or disrupts a DP107/DP178 complex, especially compounds with antifusogenic, antiviral or intracellular modulatory activity, by detecting the formation of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anti-retroviral; DP178-like; DP107-like; transmission.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-442157/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jeffs P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JUL-1999;
                                                                              protection; endogenous therapeutic peptide; peptidase; conjugation;
blood component; modification; succinimidyl; maleimido group; amino
hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 1; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DP107/DP178 complex -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                     AAB92246;
                                                                                                                                                                                                                                                       AAB92246 standard;
                                                                                                                                                   Virus
                                                                                                                                                                                     22-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HIV-1 isolate RF.
                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                             1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                                                                         YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunodeficiency virus 1 isolate RF
                                                                                                                                                   related
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US35727.
                                                                                                                                                  peptide SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0350841
                                                                                                                                                                                                                                                       Peptide; 36
                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Erickson
                                                                                                                                                  ID NO:1422
                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 200; DB 22;
Pred. No. 5.5e-18;
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                                                                                                                                                                                                                                                       AA
                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lawless MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     transmembrane protein gp41;
                                                                                                                                                                                                                                                                                                                                           36
                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Merutka
                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                               36;
                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     non-human
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WO200069900-A2 Synthetic

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                                          Query Match
Best Local S
Matches 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 36
                                                                                                            The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required for normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in
                                                                                   Sequence
                                                                                                                                                                                                                                 Disclosure; Page 525;
                                                                                                                                                                                                                                                             Heptad repeat region peptide analogs useful for inhibiting virus/cells fusion, useful for treating HIV and Respiratory Syncytial Virus
                                                                                                                                                                                                                                                                                              WPI;
                                                                                                                                                                                                                                                                                                                 Antczak JB,
                                                                                                                                                                                                                                                                                                                                                         29-FEB-2000; 2000US-0515965
                                                                                                                                                                                                                                                                                                                                                                             07-FEB-2001; 2001WO-US03988
                                                                                                                                                                                                                                                                                                                                                                                                   07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                       WO200164013-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                            Viridiae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus; HIV; respiratory syncytial virus; virucide; heptad repeat region; transmembrane protein; gp41; HRJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viral core polypeptide, SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABB02832;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                      (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABB02832 standard;
                                                                                                                                                                                                                                                     infection
                                                    Local Similarity
  \vdash
                     بر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                       specification
YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
           YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                                                                                                                                                                                              2001-514829/56
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                                                                                  36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36
                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                 Delmedico MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                   AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                   100.0%;
                                                                                                                                                                                                                                587pp; English
                                                                                                                                                                                                                                                                                                                 Erickson JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                   Score 200; DB 22; Pred. No. 5.5e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 200; DB 22;
Pred. No. 5.5e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΑA
                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1359
                                                                                                                                                                                                                                                                                                                 Lambert DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                 Sista
                                                               36;
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                                          0;
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                                                                                                                                                                                                                                                                                                                 φ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HR1;
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RSV;
1; HR2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
           В
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RESULT 10 AAU13792

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RESULT 11
AAU13793
ID AAU13
                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to peptides which exhibit anti-retroviral cactivity. The peptides of the invention (AAU1259-AAU14099) comprise DP178-like and DP107-like peptides. The DP178 peptide corresponds comprise comprise comprise comprise comprise comprise comprise compounds acids 639-673 of the transmembrane protein 9941 from human communication of the transmembrane protein 9941 from human communication compounds to amino acids 589-595 of 9941 from HIV-1LAI. The invention compression of or disrupts a DP107/DP178 compounds that inhibit the communication of or disrupts a DP107/DP178 complex. The method comprises competed the formation of a DP107/DP178 complex. Both in the presence compound of a DP107/DP178 complex both in the presence compound of a DP107/DP178 complex both in the presence compounds and DP178 peptides. The method is useful for identifying compounds, compounds and DP178 peptides. The method is useful to inhibit human and non-human corresponds compounds of the DP178-like/DP107-like peptides are useful to inhibit human and non-human corresponds on the DP178-like/DP107-like peptides.
                                                                                                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                 Matches
AAU13793 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                      of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Identifying a compound that inhibits the formation of or disrupts a DPIO7/DPI78 complex, especially compounds with antifusogenic, antivor intracellular modulatory activity, by detecting the formation of DPIO7/DPI78 complex.
                                                                                                                                                                                                                                                                                                                                                                                                              present sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 77; 259pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-442157/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2000; 2000WO-US35727
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DP178-like/DP107-like peptide T-1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200151673-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus 1 isolate LAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anti-retroviral; DP178-like;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-NOV-2001
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                                                                                                                               <u>ب</u>
                                                                                                                                                                            1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
                                                                                                                            YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
                                                                                                                                                                                                                               l Similarity
36; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lackey JW,
                                                                                                                                                                                                                                                                                                                                    36 AA;
                                                                                                                                                                                                                               100.0%; ilarity 100.0%; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiviral;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "N-terminal is substituted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV transmission;
                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                              one of the DP178-like/DP107-like peptides
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                                                                                                                                                                                                                               Score 200; DB 22;
Pred. No. 5.5e-18;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DP107-like;
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  AΑ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lawless
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Merutka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bу
                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                    36;
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                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiviral
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           non-human
                                                                                                                                                                                                                               Gaps
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ABB01247
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-ILAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required for normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in
                                                                                                                                                                                                                                                                                                                                                                                                                                   virucide; infection.
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Heptad repeat region peptide analogs useful for inhibiting virus/cells fusion, useful for treating HIV and Respiratory Syncytial Virus infection \dot{\,}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Viral DP178/107-like region peptide T1408
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                                                                                                                                                                                                                                                                                                                                                                                         Viridiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus;
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Pred. No. 5.5e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        transmembrane protein; gp41; HR1; HR2,
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Syncytial Virus
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The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in

for

Disclosure; Page 524-525; 587pp; English

Heptad repeat region peptide analogs useful for inhibiting virus/cells fusion, useful for treating HIV and Respiratory Syncytial Virus

WPI; 2001-514829/56

Antczak

Delmedico

MK,

Erickson JB,

Lambert DM,

Sista

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PA XX

(TRIM-) TRIMERIS INC

29-FEB-2000; 2000US-0515965

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Best Local
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                                                                                                                                                                                                                                 Viridiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Viral core polypeptide,
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07-FEB-2001; 2001WO-US03988
                                                                                                                                                    WO200164013-A2
                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus; HIV; respiratory syncytial virus;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                              heptad repeat region; transmembrane protein; gp41;
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Pred. No. 5.5e-18;
; Mismatches 0;
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RESULT 5
AAG67041
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                envelope protein or its fragment exterior to the viral membrane, a stabilising peptide to disrupt formation of structural intermediates necessary for viral fusion and record and optionally, a viral cell surface receptor or its fragment. The stabilising peptide is capable of associating with the envelope protein or its fragment to form a stabilised, fusion active structure. Antibody binding assays are used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to methods of generating immunogens that elicit neutralising antibodies which target regions of viral envelope proteins such as the gpl20/gp41 (glycoprotein 120/glycoprotein 41) complex of HIV-1 (human immunodeficiency virus 1). Sequences AU70179-AAU70198 and AAU70677-AAU70743 represent stabilising peptides modelling the alpha-helical regions of the ectodomain of the HIV-1 transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Immunogenic composition for inhibiting HIV infection, comprises viral envelope protein or its fragment exterior to viral membrane, a stabilising peptide, and optionally, viral cell surface receptor or its fragment
Human immunodeficiency virus; HIV; respiratory syncytial virus;
                                 HIV-1 gp41 peptide DP178 homologue DP-185.
                                                                     03-JAN-2002
                                                                                                     AAG67041;
                                                                                                                                     AAG67041 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                   determine the ability of immunogen vaccines to generate an immune response to various forms of envelope. Virus neutralisation assays can be used to characterise the antibody response raised against HIV-1 gp41 domains. The sequences and methods are useful for inhibiting HIV
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anti-HIV; stabilising peptide; viral envelope protein; glycoprotein 120;
alpha-helical region; ectodomain.
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Conservative
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Pred. No. 5.5e-18;
; Mismatches 0;
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RESULT 6
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Best Local Similarity
Matches 36; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided
                              WO200164013-A2
                                                                                                                                                       Viridiae
                                                                                                                                                                                                     Human immunodeficiency virus; HIV; respiratory syncytial virus; RSV; virucide; heptad repeat region; transmembrane protein; gp41; HR1; HF
                                                                                                                                                                                                                                                  Viral DP178/107-like
                                                                                                                                                                                                                                                                                 03-JAN-2002
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                                                                           Modified-site
                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the specification
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-FEB-2000; 2000US-0515965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200164013-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                       1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Delmedico
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US03988
                                                                          36
                                                                                                                         Location/Qualifiers
                                                             /note=
                                                                                          /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                region peptide T1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MK,
                                                           "C-terminal amide"
                                                                                        "N-terminal is substituted by Ac"
                                                                                                                                                                                                                                                                                                                                              36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Erickson JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 200; DB 22;
Pred. No. 5.5e-18;
                                                                                                                                                                                                                                                                                                                                              AΑ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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Syncytial Virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
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RESULT 2
AAR98400
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Best Local S
Matches 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This peptide is isolated from HIV-1 isolate RF, and is a homologue of the peptide DP-178. DP-178 corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the 9p41 ectodomain, and complexes with DP-107 (corresponds to amino acids 58-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein protein interactions, and possess anti-viral activity. The peptide inhibits transmission to uninfected cells, and can also be used as type and/or subtype acception of the peptide cells.
                                                                 The sequences given in AAR98398-408 represent peptides which exhibit antifusogenic activity, antiviral capability and/or the ability comodulate intracellular processes involving coiled coil peptide structures. These peptides are recognised by the ALLMOTIS,
                                                                                                                                                                  Inhibiting viral transmission, isolated peptide recognised by sequence search motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antifusogenic activity; antiviral capability; coiled-coil per ALLMOTI5; 107x178x4; PLZIP search motif; viral transmission; influenza virus; hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR98400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR98400 standard; peptide; 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        subtype specific diagnostic tools.
                                                                                                                                                                                                                            WPI;
                                                                                                                                                                                                                                                                                                                                          06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide corresponding to résidues 638-673 of HIV-1(RF) gp41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-FEB-1997
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                                                                                                                                      Disclosure; Fig 1; 471pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                               27-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9619495-A1
                            hepatitis
                                                                                                                                                                                                                                                        Matthews
                                                                                                                                                                                                                                                                    Barney
                                                                                                                                                                                                                                                                                                             (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                   20-DEC-1995;
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                                                      07x178x4
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                                                                                                                                                                                                                            1996-309517/31.
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's TJ,
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                      he transmission of a virus, pref. HIV, influenza virus of B virus, to a cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36
                                                                                                                                                                                                                                                     Bolognesi DP,
, Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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94US-0360107.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   English.
                                                                                                                                                                                                                                                       Lambert DM, Wild CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 200; DB 16;
Pred. No. 5.5e-18;
Mismatches 0;
                                                                                                                                                                                e.g. HIV or RSV, to a can ALLMOTI5, 107x178x4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₿
                                                                                                                                                                                                                                                                   Langlois
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                                                                                                                                                                                              a cell -
                                                                                                                                                                                 or PLZIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptide;
on; HIV;
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Sequence

36

14-FEB-2002

(first entry)

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RESULT 3
AAW17013
RESULT
AAU7016
ID AF
XX
AC AF
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DT 14
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Best Local Similarity
Matches 36; Conser
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                                                                                                                                                                                                                                              AAW17012-w17016 are DP-178 homologues that are useful in the treatment of HIV infection. DP-178 is a peptide corresponding to residues 638-673 of HIV type 1 glycoprotein 41 (gp41) transmembrane protein. DP-178 and its derivatives/homologues are used in combination with a therapeutic agent, e.g a reverse transcriptase, viral protease, cytokine, glycosylation or viral mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication or inhibiting transmission. They may also be used in vaccines for protecting against HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                        Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent – useful for treatment of HIV infection, esp. inhibiting replication or transmission of HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV; SIV: human; simian immunodeficiency virus; glycoprotein 41; transmembrane; antiviral; DP-178; DP-107; vaccine; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW17013 standard;
                          AAU70181;
                                                    AAU70181
                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Figure 1; 84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Johnson RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9640191-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus type 1 RF isolate.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW17013;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        replication;
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                                                                                                                               YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF 36
                                                                                                                YTGIIYNLLEESQNQQEKNEQELLELDKWANLWWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                    standard;
                                                                                                                                                                                                                        36
                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peptide useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lambert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                          AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide;
                                                  Peptide;
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                                                                                                                                                                     0
                                                  36
                                                                                                                                                                    Score 200; DB 18;
Pred. No. 5.5e-18;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 200
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ΑA
                                                    AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              treatment of HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200; DB 17;
No. 5.5e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'l number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
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1: /SIDS2/gcgdata/ge
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Gapop 10.0 , Gapext 0.5
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147.792 Million cell updates/sec
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200
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT: *
| SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT: *
| SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT: *
| SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT: *
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                                                                                                                                                                                                                                                                                                       Length
        \begin{smallmatrix} \mathbf{G} & \mathbf{G} 
                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                         IJ
     AAR67699
AAR98400
AAW17013
AAU70181
AAG67041
ABB01246
ABB01247
ABB02831
ABB02831
AAU13792
                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
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                                                                                HIV viral envelope
HIV-1 gp41 peptide
Viral DP178/107-1i
Viral DP178/107-1i
                                                                                                                                                                                                                                                                                                    Description
                                                       Viral
Viral
Viral core polypep
Viral core polypep
DP178-like/DP107-l
                                                                                                                                                                                       DP-178 homologue d
Peptide correspond
DP-178-like peptid
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AAR67699
     Computer search ge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiviral activity human immunodefici alpha helix; leuci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DP-178 homologue d
                                                                                   WPI; 1995-036105/0
                                                                                                                                  Barney SO, E
Petteway SR,
                                                                                                                                                                                                                                                                           07-JUN-1993;
                                                                                                                                                                                                                                                                                                                             07-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                  22-DEC-1994.
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Database

Searched:

Result No.

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9. R. Lambert DM, Matthews synthetic peptides - ar	om HIV-1 RF has antiv DP-107; diagnostic; is; transmembrane prot ; DP-185.	22291 6838 6828 6828 6832 6832 1490 1490	AAU113793 AAU14013 AAB578239 AAB578239 AAB578239 AAB578239 AAB722837 AAB722837 AAP70175 AAP80966 AAAP722854 AAP722854 AAY228658 AAY228642 ABG68313 AAY22845 ABG68315 AAF67698 AAB67698 AAB67698 AAR67698 AAR67698 AAR67698 AAR17012 AAR67040 AAR67040 AAR67040 AAR67040 AAR922847 AAG67040 AAR922847
TJ; re inhibitors of	ral activity. HIV-1LAI; ein; gp41;	EQ ID NO. 110 IV envelope pr EQ ID NO. 13 f nvelope protei EQ ID NO. 48 f nvelope protei EQ ID NO. 67 f consensus seque IV-1 BA-L clon	178-like/DP10: 178 homologue rus related pe rus polypeptide ve polypeptide ve polypeptide ve polypeptide velope protein 10 ID NO. 38 fi velope protein velope protein 110 ID NO. 38 fi velope protein 1118 homologue 0 ID NO. 43 fr velope protein

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PRICAMI: JOHN, MOORE P

ITLE OF INVENTION: STABILIZED VIRAL ENVELOPE PROTEINS AND USES THEREOF

FILE REFERENCE: 2048/59331az

CURRENT FILING DATE: 2002-10-24

CURRENT FILING DATE: 2002-00-24

PRIOR PELICATION NUMBER: 09/602,864

PRIOR PELING DATE: 2000-06-23

NUMBER OF SEQ ID NOS: 17

SOFTWARE: Patentin version 3.1

SEQ ID NO 15

SEQ ID NO 3.1

ORGANISM: Human immunodeficiency virus type 1

US-10-032-162-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEPHONE: 650/952-9881
TELEPAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 269 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-854-816-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
US-10-032-162-15
US-10-032-162-15
; Sequence 15, Application US/10032162
; Publication No. US20030052839A1
; GENERAL INFORMARION:
; GENERAL INFORMARION:

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                                                        Query Match
Best Local Similarity
"~+~hes 33; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: BINLEY, JAMES M
APPLICANT: SCHUELKE, NORBE
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatin (Genentech)

CURRENT APPLICATION NUMBER: US/09/854,816

FILING DATE: 15-May-2001

CLASSIFICATION: CURROWN>

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   536 YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 93.4%;
Local Similarity 91.7%;
nes 33; Conservative
                 1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: California
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                           OLSON, WILLIAM C
                                                                                                                                                                                                                                                                                                                                                                                        PAUL, MADDON J
JOHN, MOORE P
                                                                                                                                                                                                                                                                                                                                                                                                                                              SCHUELKE, NORBERT
                                                                          Conservative
                                                                                        93.4%;
91.7%;
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Pred. No. 9.6e-15;
                                                                          2; Mismatches
                                                                                        Score 185; DB 9;
Pred. No. 2.2e-14;
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Search completed: May 16, 2003, 12:10:22

Job time : 16.759 secs

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RESULT 13
US-09-854-816-9
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(S-09-854-816-8

; Sequence 8, Application US/09854816

; Patent No. US20020151473A1

; GENERAL INFORMATION:
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                                                                                                                                   Best Loc
Matches
                                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                     TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO: 8: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                168 YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                    Local Similarity
les 33; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                     SEQUENCE DESCRIPTION: SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5 i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                      LENGTH: 268 amino acids TYPE: Amino Acid TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: CUNKNOWN>
R APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: 3.5 inch, 1.44 Mb 1
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 1 DNA Way
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OF SEQUENCES:
                                                                                                                                    Conservative
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Melissa A. Starovasnik
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                                                                                                                                                93.4%;
91.7%;
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inch, 1.44 Mb floppy disk
                                                                                                                                                Score 185; DB 10;
Pred. No. 9.6e-15;
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                                                                                                                                   Mismatches
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                                                                                                                                                                  Length 268;
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                                                                                                                                   Indels
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Best Local Similarity
Thehes 33; Conserve
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US-09-854-816-12
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                                                                                                                                                                                                                                          Sequence 12, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 9, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                     168 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                                                                                                                                                                                                                                                                              1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                TITLE OF INVENTION: Constrained Helical Peptides and Methods Making Same NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA
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COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       James A. Wells TITLE OF INVENTION: Constrained
STREET: 1 D
CITY: South
             ADDRESSEE: Genentech, Inc
STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                              Melissa A. Starovasnik
                                                                                                                                                              J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
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Robert S. McDowell
Robert Stopher Phelan
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                                                                                                                            James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93.4%;
91.7%;
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COUNTRY: USA

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TOPOLOGY: Linear

MOLECULE TYPE: HIV-JRCSF
SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-854-816-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 28, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            168 YTNTIYTLIEESQIQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
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COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Torchia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                        SOFTWARE: Wilpatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 ii
                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: CUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 268 amino acids TYPE: Amino Acid
                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Genentech, Inc. STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                    STATE: California
                                                                                                                                                                                                                                                                                                                      CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Andrew C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kevin Judice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94.48;
                                                                                                                                                                                                                                                                                                                                                                                                                        Making Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Braisted
                                                                                                                                                                                                                           inch, 1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 187; DB 10;
Pred. No. 5.5e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
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CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
SOFTWARE: PATENTIN VERSION 3.0
SEQ ID NO 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT ; ORGANISM: Human immunodeficiency virus type 1 US-09-779-451-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-779-451-47; Sequence 47, A
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Best Local
                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.0 SEQ ID NO 47
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Best Local Similarity
Matches 33; Conserv
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                                                                                                                                                                                                                                                                                                      Sequence 45, Application US/09779451 Patent No. US20020094521A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Allaway, Graham P. TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 28: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              169 YTSLIYTLLEESQNQQEKNEQELLELDKWASLWNWF 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE DESCRIPTION: SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Torchia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09779451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 269 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Timothy E.
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; SEQ ID NO 4; LENGTH: 619; TYPE: PRT; ORGANISM: Human i US-09-891-609-4
RESULT 6
US-09-891-609-2
; Sequence 2, Application US/09891609
; Patent No. US20020127238A1
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Best Local Similarity 94...
34; Conservative
                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4, Application US/09891609 Patent No. US20020127238A1
                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2001-06-26 PRIOR APPLICATION NUMBER: 60/214,608 PRIOR FILING DATE: 2000-06-27 NUMBER OF SEQ ID NOS: 4 SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Stamatatos, Leondias
TITLE OF INVENTION: HIV-1 VACCINES AND SCREENING METHODS THEREFOR
FILE REFERENCE: 2570-1-002N
                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/891,609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Torchia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REBERENC/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEPHONE: 650/225-9881
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
                                                                                                           574 YTNLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 i
                                                                                                                                                                                  34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                      immunodeficiency virus type 1
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                                                                                                                                                                                                 96.0%;
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                                                                                                                                                                                                 Score 190; DB 10;
Pred. No. 5.8e-15;
                                                                                                                                                                                Mismatches
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                                                                                                                                                                                                                 Length 619;
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RESULT 8
US-09-854-816-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 2
LENGTH: 847
TYPE: PRT
                                                                                                                                                                                                                                                        Sequence 7, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: BARNETY, Susan
APPLICANT: HARTOG, Karin
APPLICANT: MARTIN, Eric
TITLE OF INVENTION: MODIFIED HIV ENV POLYPEPTIDES
FILE REFERENCE: 1605.002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.1
SEQ ID NO 2
LENGTH: 646
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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CURRENT FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 200 NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/891,609
CURRENT FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: 60/214,608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Stamatatos, Leondias
TITLE OF INVENTION: HIV-1 VACCINES AND SCREENING METHODS THEREFOR
FILE REFERENCE: 2570-1-002N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                      629 YTNLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601 YTNLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity es 34; Conserv
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les 34; Conserv
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                                                                      CORRESPONDENCE ADDRESS
                                                                                                                              TITLE OF
                                                                                       NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                       APPLICANT: Andrew C. Braisted
CITY: South San Francisco
STATE: California
                                    STREET: 1 DNA Way
                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                          INVENTION: Constrained Helical Peptides and
                                                                                                                                                                          J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
                                                                                                                                                              Melissa A. Starovasnik
                                                                                                                                             James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000-06-27
                                                   Genentech, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96.0%;
94.4%;
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94.4%;
                                                                                                     Making Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 190; DB 10; Pred. No. 8.1e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 190;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 847;
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US-09-854-816-30
US-09-854-816-30
Sequence 30, Application US/09854816
Patent No. US20020151473A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;; SEQUENCE DESCRIPTION: SEQ ID NO: 11: US-10-000-321-11
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RESULT 3
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                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEFAX: 650/252-8674
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 30:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Best Local Similarity
                                                                                                                                                                    Query Match
                                                                                                                                Matches
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                                                    169 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 204
                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF .36
                                                                                          1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatin (Genentech)

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                        LENGTH: 269 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
SEQUENCE DESCRIPTION: SEQ ID NO: 30:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Making Same NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Genent
STREET: 1 DNA Way
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kevin Judice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genentech, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 198; DB 12; 100.0%; Pred. No. 1.4e-16;
                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <Unknown>
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                                                                                                                              Score 198; DB 10;
Pred. No. 2.7e-16;
; Mismatches 0;
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                                                                                                                                                                Length 269;
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                 US-09-854-816-26
                                                                                                                                                                                                                                                                                                     RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 31, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                         Sequence 26, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 31:
                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/965,056
FILING DATE: <UNKNOWN>
ATTORNBY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: <U PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Andrew C. Braisted
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech,
STREET: 1 DNA Way
                                                                                           TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                APPLICANT: Andrew C. Braisted
J. Kevin Judice
Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: Linear SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 113
                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: South San F
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 269 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Genentech, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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Robert S. McDowell
                                                                                                                               Melissa A.
                                                                                                                                              J. Christopher Phelan
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                                                                                                                               Starovasnik
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 198; DB 10;
Pred. No. 2.7e-16;
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GenCore version 5.1.4_p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model
Run on:

May 16, 2003, 11:20:00; Search time 15.759 Seconds (without alignments)
220.333 Million cell updates/sec
Title:
 US-09-623-533A-3
Perfect score: 198
Sequence: 17MVTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5
Searched: 362588 seqs, 96450795 residues

inumber of hits satisfying chosen parameters: 362588
Minimum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Dublished Applications Ab.**
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Database: Published_Applications_AA:*

1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

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4: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

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13: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	19	18	17	16	15	14	13	12	11	1.0	9	8	7	σ	ъ	4	ω	N	1	No.	Result
	184	184	185	185	185	185	185	185	185	185	187	187	190	190	190	190	198	198	198	Score	
,	92.9	92.9	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	94.4	94.4	96.0	96.0	96.0	96.0	100.0	100.0	100.0		Ouerv
	268	267	643	625	579	269	268	268	46	36	269	268	847	646	619	268	269	269	145	Length [
	10	10	9	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	12	DB	
	US-09-854-816-41	US-09-854-816-38	US-10-032-162-13	US-10-032-162-17	US-10-032-162-15	US-09-854-816-12	US-09-854-816-9	US-09-854-816-8	US-09-779-451-45	US-09-779-451-47	US-09-854-816-28	US-09-854-816-7	US-09-476-242-2	US-09-891-609-2	US-09-891-609-4	US-09-854-816-26	US-09-854-816-31	US-09-854-816-30	US-10-000-321-11	ID	
į	41.	Sequence 38, Appl	Sequence 13, Appl	Sequence 17, Appl	Sequence 15, Appl	Sequence 12, Appl	9	Sequence 8, Appli	Sequence 45, Appl	Sequence 47, Appl	28,	Sequence 7, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 4, Appli	`	Sequence 31, Appl	•	Sequence 11, Appl	Description	

ALIGNMENTS

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STREET: 3000 K S CITY: Washington

3000 K Street, N.W., Suite 500

D.C.

COUNTRY:

USA

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B
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US-09-131-551-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-394-021-11
                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No. 6335158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                         APPLICANT: KNAPP, Stefa
APPLICANT: GERREN, Manf
APPLICANT: GUERTLER, LI
APPLICANT: GUERTLER, LI
TITLE OF INVENTION: Pep
TITLE OF INVENTION: the
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 11:
                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: DE P
FILING DATE: 23-FEB-1994
ATTORNEY/AGENT INFORMATION:
NAME: SANDERCOCK, Colin C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 145 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                       CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 58:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   106 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 141
                                                   APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/0:
FILING DATE: 23-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: PC-DOS/MS-DOS
                                     CLASSIFICATION:
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                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                         CITY: Washington
                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
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20007-5109
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                                                                                                                                                                                                                       D.C.
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KNAPP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                 GERKEN, Manfred
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                                                                                                                                                                                                                                                                                                                        Peptides derived from a retrovirus of the HIV group, and their use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 198; DB 2; 100.0%; Pred. No. 6e-17;
                                                                                                                                                                                                                                                                                                                                                               Lutz
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 08/394,021
                                                                   us/09/131,551
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                                                                                                                                                                                                                                                           Suite 500
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US-09-131-551-11
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Best Local Similarity 100.
Conservative
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             Query Match
Best Local Similarity
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Matches
                                                                                                                                                                  CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: TOTCHIA, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                        TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: SANDERCOCK, Colin G.
REGISTRATION NUMBER: 31.298
REFERENCE/DOCKET NUMBER: 58
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DO: SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
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                                                                                                                                        TELEPHONE: 650/252-9881
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                                                                             TOPOLOGY:
                                                                                                         LENGTH:
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5. 6271198
36;
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                                                                                          Amino Acid
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Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                J. Christopher Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (202)672-5399
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Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                             IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                           Linear
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         100.0%; Score 198; DB 4; 100.0%; Pred. No. 1.2e-16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                            1.44 Mb floppy disk
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Mismatches
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                          Length 269;
Indels
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US-08-255-208A-3
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Best Local Similarity 100.0%;
Matches 36; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/315,304B CURRENT FILING DATE: 1999-05-20 PRIOR APPLICATION NUMBER: 09/082,279 PRIOR FILING DATE: 1998-05-20 NUMBER OF SEQ ID NOS: 1667 SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC PITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Barney, S. APPLICANT: Guthrie, K. APPLICANT: Merutka, G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     equence 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                    ENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 36
 SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/255,208A
                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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                                                                                                                                                                      CITY: New York
STATE: New York
                                                                                                                                                                                                         STREET:
                                                                                                                                                   COUNTRY:
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                                                                                                                                                                                                           1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                  Barney, Shawn O.
Barney, Shawn O.
Lambert, Dennis M.
Petteway Jr., Stephen R.
Petteway Jr., Stephen R.
VENTION: SYNTHETIC PEPTIDE INHIBITORS OF
                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                             Wild, Carl T.
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                                                                                                                                                                                                                                                                                  TRANSMISSION
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Pred. No. 1.3e-17;
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US-08-394-021-11
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; ORGANISM: Human
US-09-570-921-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 16
LENGTH: 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: SERRES, P
TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE: 1062
                                                                                                                                                                                       Patent No.
                                                                                                                                                                                                       Sequence 11, Application US/08394021
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Best Local Similarity 100.0%;
Matches 36; Conservative (
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CURRENT FILING DATE: 2000-05-15
PRIOR APPLICATION NUMBER: PCT/FF98/02447
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: FR/97/14387
PRIOR FILING DATE: 1997-11-17
PRIOR FILING DATE: 1997-11-17
                                                                                                                                                                    GENERAL INFORMATION:
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                              APPLICANT: GUERTLER, Lutz
TITLE OF INVENTION: Peptides derived from a retrovirus of
TITLE OF INVENTION: the HIV group, and their use
NUMBER OF SEQUENCES: 11
                                                                                          APPLICANT: BRUST, Stefan
APPLICANT: KNAPP, Stefan
APPLICANT: GERKEN, Manfred
APPLICANT: GUERTLER, Lutz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,
                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 100.
nes 36; Conservative
                                                                                                                                                                                                                                                                                                    99 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 134
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(212) 869-9741/8864
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Foley & Lardner
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METHOD FOR OBTAINING VACCINES FOR PREVENTING THE
PATHOGENIC EFFECTS RELATED TO A RETROVIRAL INFECTION
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Pred. No. 1.3e-17;
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US-08-485-264A-3
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                                                                                                                                              RESULT
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                                                             GENERAL INFORMATION: APPLICANT: Barney,
                                                                                              Sequence 1357, Application US/09082279B Patent No. 6258782
                                                                                                                                                                                                                                                              Matches
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Best Local Similarity
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                              APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ, LAUTA A.
REGISTRATION UNMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
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MOLECULE TYPE:
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APPLICATION NUMBER: US,
FILING DATE: 07-JUN-199
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
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10036-2711
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                             Barney, Shawn
Guthrie, Kelly
Merutka, Gene
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Anwer, Mohmed 
Lambert, Dennis
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(212) 869-9741/8864
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Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
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                                                                                                                                                                                                                                                              Conservative
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Pred. No. 1.3e-17;
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Best Local S
Matches 36
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                                                                                           TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
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ORGANISM: Artificial Sequence
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF INVENTION:
TOPOLOGY: unknown MOLECULE TYPE: pept
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                                                                               SEQUENCE CHARACTERISTICS
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                                                                                                                                                                             NAME: COTUZZÍ, Laura A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78
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les 36; Conserv
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                               STRANDEDNESS
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10036-2711
                                                amino acid
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                                                                36 amino acids
                                                                                                                              E: (212) 790-9090
(212) 869-9741/8864
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Langlois, Alphonse
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Lambert, Dennis M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pennie & Edmonds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VIRUS TRANSMISSION
                                                                                                                                                                                                                                                                                                               Release #1.0,
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                                                                                                                                                                                                                                                                                                                   Version
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CURRENT APPLICATION DATA:

SOFTWARE:

PatentIn Release #1.0, Version #1.30

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

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TELEPAX: (212) 869-9741/8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 3:
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APPLICANT: Langlois,
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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ZIP: 10036-2/1.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FOOS/MS-DOS
COMPUTER: PC-TOS/MS-DOS
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                                                                                                                                                                    COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78.
TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7872-023
FELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                            ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
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                                                                                                               APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
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STATE: New York
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Langlois, Alphonse J.
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                                                                                                                                                   US/08/485,551A
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Pred. No. 1.3e-17;
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US-08-471-913A-3
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Query Match
Best Local Similarity
Matches 36; Conserv
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Best Local :
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SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                           TOPOLOGY: ur
MOLECULE TYPE:
                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/471,913A FILING DATE: 07-UW-1995 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION: NAME: COTUZZI, LBUTA A. BEGISTRATION NUMBER: 30 742
                                                                                                                                      SEQUENCE CHARACTERISTICS: LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION:
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MOLECULE TYPE: peptide
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TELEX: 66141 PENNIE
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36; Conserv
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                                                                                             unknown
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              Score 198; DB 3; Pred. No. 1.3e-17;
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Pred. No. 1.3e-17;
 Mismatches
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US-08-919-597-3
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                                           Patent No.
                                                       Sequence 3,
                                                                                                                                                                                         Matches
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            GENERAL INFORMATION:
APPLICANT: Bologne
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CORRESPONDENCE ADDRESS:
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REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
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ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
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                                                                                                                                                                                                                                                              TOPOLOGY: unknown MOLECULE TYPE: peptide
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10036-2711
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                                                       Application US/08919597
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1155 Avenue of the Americas
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Petteway, Stephen R.
Langlois, Alphonse J.
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Bolognesi, Dani P.
Matthews, Thomas J.
                                                                                                                                                                                           Conservative
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)N: 435
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; Mismatches 0;
                                                                                                                                                                                                       Score 198; DB 3; Pred. No. 1.3e-17;
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                                                                                                                                                                                                                       Length 36;
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US-08-475-668A-3
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Best Local Similarity
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TITLE OF INVENTION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FISH PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                              APPLICANT: PETTEWAY, STEPHEN R.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE TITLE OF INVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING INFI
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                                                                                                    CORRESPONDENCE ADDRESS:
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                                                                                                                   NUMBER OF SEQUENCES:
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Langlois, Alphonse J.
Langlois, Alphonse J.
VENTION: METHODS AND COMPOSITIONS FOR INHIBITION
VENTION: OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
VENTION: TRANSMISSION
EQUENCES: 273
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(212) 869-9741/8864
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Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
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Masciotra S., Livellara B., Belioso W., Clara L., Tanuri A., Ramos Baggs J., Li R., Pleniazek D.;
Beyldence for a high frequency of HTV-1 subtype F infections among metalence for a high frequency of HTV-1 subtype F infections among heterosexual population in Buenos Aries, Argentina.";
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Costa L.J., Telles J.G.,
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                                                                                                                                                                                                                                                                                                                                CRC64;
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RESULT 10
Q9YXN4
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Q9EAA2
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Q9YXN4;
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                                                                                                                                                                                                                                                                                                                                                                                                  Q9EAA2;
01-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "HIV-1 subtypes among blood do
Submitted (NOV-1997) to the EM
EMBL; AF034069; AAC79321.1; ...
InterPro; IPR000328; Env_GP41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tanuri A., Swanson P.A., Costa L.J., Telles J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-RJ97BRP116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Viruses; Retroid viruses; NCBI_TaxID=11676;
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             subtypes, Bronx, New York: a sentinel site diversity in the United States.";
J. Infect. Dis. 181:470-475(2000).
                                                         Weidle P.J., Ganea C.E., Irwin K.L., Pieniazek D., McGowan J.P., Olivo N., Ramos A., Schable C., Lal R.B., Holmberg S.D., Ernst J.A.; "Presence of human immunodeficiency virus (HIV) type 1, group M, non-B subtypes, Bronx, New York: a sentinel site for monitoring HIV genetic
                                                                                                                                                                                                                                                                                                              ENV
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01-DEC-2001
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NCBI_TaxID=11676;
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94.4%;
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91.7%;
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19,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Retroviridae;
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Last annotation updat
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Pred. No. 1.6e-14;
                                                                                                                                                                                                                                                                                   type 1
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Pred. No. 2.
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2.8e-15;
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RESULT 13 Q9YXM9

Q9YXM9; Q9YXM9; 01-MAY-1999

01-MAY-1999 (TrEMBLrel. 01-DEC-2001 (TrEMBLrel.

(TrEMBLrel, 10,

Created)

PRELIMINARY;

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Envelope glycoprotein Human immunodeficiency virus

immunodominant 10,

Last sequence update)
Last annotation updat
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update) (Fragment).

Retroviridae;

Lentivirus

type

AC DT DT DT DT DE GN OS OC OX

ENV

Viruses; Retroid viruses;
NCBI_TaxID=11676;
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RESULT 12
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NON_TER 122
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011944;
01-JUL-1997 (TrEMBLrel. 04,
01-JUL-1997 (TrEMBLrel. 04,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type Viruses; Retroid viruses; Retrovir NCBI_TaxID=11676;
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                                                                                                                   MEDLINE=98035047; PubMed=9367752;
Douglas N.W., Munro G.H., Daniels R.S.;
"HIV/SIV 94/coproteins: Structure-Function
J. Mol. Biol. 273:122-149(1997).
EMBL; Y13716; CAA/74044.1;
InterPro; IPR000277; GP120.
                                                                                                                                                                                                                                                                                                                                    ZNV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                            Pfam; PF00516; GP120; 1. Pfam; PF00517; GP41; 1. AIDS; Coat protein; Glyco SEQUENCE 849 AA; 9661
                                                                                                                                                                                          STRAIN-GB8
                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                        vella C., Smith M.H., Farrar G.H., J
"A molecular and serologic study of
isolate: HIV-IGB8.";
                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                          Envelope
                                                                                                                                                                                                                       Vaccine 13:735-741(1995).
631 YTNTTYTLIEESQNQQEKNEQELLELDKWANLWNWF
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122 AA;
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                                        Conservative
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14751 MW;
                                                                             Glycoprotein;
96612 MW; 30
                                                94.9%;
91.7%;
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91.78;
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Pred. No. 2.8e-15;
2; Mismatches 1
                                                Score 188; DB 1
Pred. No. 2e-14;
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envelope
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                                                                                         Transmembrane
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Matches
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Best Local :
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01-NOV-1999
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases EMBL; U69585, AADDS, 21.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF005516; GP120; 1.
Pfam; PF00517; GP41; 1.
ALDS; Coat protein; Glycoprotein; Polyprofein. Transmort
Pfam;
Pfam;
                                Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases EMBL; U69592; AAD10939.1; --
InterPro: IPR000328; Env_GP41.
InterPro: IPR000777; GP120.
                                                                                                    Non-Progressive Infection
                                                                                                                                      Fang G., W
Burger H.;
                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                          Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
                                                                                                                                                                                                                                                                           Envelope polyprotein.
                                                                                                                                                                                                                                                                                                                                                 Q9WJU4;
                                                                                                                                                                                                                                                                                                                                                                   09WJU4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
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01-DEC-2001 (TrEMBLrel.
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AIDS; Coat protein; Glycoprotein;
SEQUENCE . 860 AA; 97739 MW; IFE
                                                                                                                                                                                                        NCBI_TaxID=11676;
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                                                                                                                    "Complete Plasma HIV-1 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=11676;
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 PF00516;
PF00517;
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GP120; 1
GP41; 1.
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94.4%;
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Last annotation updat
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Pred. No. 1.2e
1; Mismatches
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lfEB24AAFD7F4216 CRC64;
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                                                                                                                                                    Townsend L., Wang
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                                                                                                                      Deletion
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RESULT 9
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Best Local
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Q9E1R5;
01-MAR-2001 (TrEMBLrel 1
01-MAR-2001 (TrEMBLrel 1
01-JUN-2002 (TrEMBLrel 2
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Q9YP48;
01-MAY-1999
01-MAY-1999
01-DEC-2001
              Trinidad and Tobago.";
Proc. Natl. Acad. Sci. U.S.A.
EMBL; AF277073; AAG22516.1;
InterPro; IPR000328; Env_GP411
InterPro; IPR000777; GP120.
                                                                                        Cleghorn F.R., Jack N., Carr J.K., Edwards J., Mahabir B., McDanal C.B., Connolly S.M., Goodman D., Bennetts R.Q., O'I Weinhold K.J., Bartholomew C., Blattner W.A., Greenberg M. T., A distinctive clade B HIV type 1 is heterosexually transmi
                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE=20442410; PubMed=10984542;
                                                                                                                                                                                                                                                  ENV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Non-Progressive Infection."; Submitted (SEP-1996) to the EMBL/GenBank/DDBJ EMBL; U6958; AAD10891.1; -..
                                                                                                                                                                                                                 Human immunodeficiency vi
Viruses; Retroid viruses;
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InterPro;
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                                                                                                                                                                                                                                                              Envelope
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein;
SEQUENCE 864 AA; 98167 MW; 2A
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Pro; IPR000777;
PF00516; GP120
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34; Conserv
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IPR000777; GP120.
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94.4%;
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es; Retroviridae;
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Pred. No. 1
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BE12C858E9CE4D11 CRC64;
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T.R.,
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01-DEC-2001
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01-MAY-2000
01-MAY-2000
01-JUN-2001
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MEDLINE-91366314; PubMed*-1890410;

Farrar G.H., Roff M.A., Amin T., Ball J., Parrett A.M.,

Battacharyya U., Booth J., Wansbrough-Jones M.H., Greena

"Characterisation of a series of human immunodeficiency
derived sequentially from a single patient.";

J. Med. Virol. 34:104-113(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=SUBTYPE B;
MEDLINE=96100812; Pub)
Vella C., Smith M.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-SUBTYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus type Viruses; Retroid viruses; Retrovir NCBI_TaxID=11676;
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                                   Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                       STRAIN=SUBTYPE B;
MEDLINE=20418939; PubMed=10954893;
Novelli P., Vella C., Oxford J.S.,
"Biological characterization of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
SEQUENCE FROM N.A. MEDLINE=96100812; Vella C., Smith M.
                                                                            GP160=ENVELOPE
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.H., Farrar G.H.,
 PubMed=7483788; .H., Farrar G.H.,
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                                                                                                                                                                                                                       97.5%;
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Q8Q863;
01-JUN-2002
01-JUN-2002
01-JUN-2002
                                                                                                                                                            01-MAY-1999
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                  "Evidence for the spread of immune-escape HIV-
Korean population.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ
EMBL; AJ417415; CAD10127.1;
SEQUENCE 859 AA; 97075 MW; D18738408EB40D4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pfam; pF00516; GF120; 1.
pfam; pF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; 1
SEQUENCE 849 AA; 96704 MW; 78F1C47ACA79F3EE
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InterPro; IPR000777; GP120.
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Vaccine 13:735-741(1995).
        InterPro;
InterPro;
                          Non-Progressive Infection.";
Submitted (SEP-1996) to the EMBL/GenBank/DDBJ
EMBL; U69588; AAD10907.1;
                                                                                                         Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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01-MAY-1999
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                                                                             SEQUENCE FROM N. Fang G., Weiser
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                                                                     Burger H.;
                                                         "Complete Plasma HIV-1 Sequence:
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Q8u17	Q8ul8	Q8u18	Q8u17	32	Q7328	15	29	Q9e1s	Q91k0	Q8q85	05611	Q8q85	Q7736	Q75760	04155	Q9ik0	Q9yxr:	29у хс	9	04154	Q73303	92	9 i	Q9ea8	9ea	9e	8 q 8	7
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ENV_HVIBR STANDARD; PRT; 861

ID ENV_HVIBR STANDARD; PRT; 861

RC p03377;

OT 21-JUL-1986 (Rel. 01, Created)

OT 21-JUL-1986 (Rel. 01, Last sequence upda)

OT 15-JUL-1996 (Rel. 38, Last annotation up)

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 immunodeficiency
es; Retroid virus
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   virus type 1 (BR
es; Retroviridae;
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Institute of Bioinformatics and the EMBL outstation
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Viruses; Retroid viruses;
NCBI_TaxID=11707;
                                                                                                                                               AIDS;
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InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                       antibodies present in Cell 41:979-986(1985).
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antibodies present in the sera of AIDS patients.";
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G.M., Wong-Staal F., Reddy E.P.
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GP160 precursor [Contains: Exterior membrane; Transmembrane glycoprotein (GP41)].
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                                                                    SWISS-PROT entry is copyright. It is produced throughout the Swiss Institute of Bioinformatics and the European Bioinformatics Institute. There are no re
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                     non-profit institutions as long and this statement is not removed. s requires a license agreement (See lan email to license@isb-sib.ch).
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e polyprotein GP160 p
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
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InterPro;
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PIR; A03973; VCLJH3.
HIV; M15654; ENV$BH102.
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                                                                               Similarity
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IPR000777; GP120.
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InterPro; IPR000328; ENV_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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Ratner L., Fisher A.,
Gallo R.C., Wong-Staa
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MEDLINE=87399196; PubMed=3040055;
Ratner L., Fisher A., Jagodzinski
Gallo R.C., Wong-Staal F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-AUG-1987 (Rel. 05, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior of a plycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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RESULT 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENV_HVIOY STANDARD: PRT; 8
P20888; 01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence up
15-JUL-1999 (Rel. 38, Last annotation
Envelope polyprotein GP160 precursor [
glycoprotein (GP120); Transmembrane gl
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Huet T., Dazza M.C., Brun-Vezinet F., Roelants G.
"A highly defective HIV-1 strain isolated from a
individual presenting an atypical western blot.";
AIDS 3:707-715(1989).
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InterPro; IPR000777; GP120.
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Viruses; Retroid viruses; Retroviridae;
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; PF00517; GP41; 1
; Coat protein; Po
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RESULT 11
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Best Local
                 DISULFIDE BONDS, AND CARBOHYDRATE-LINKA
MEDLINE=90285159; PubMed=2355006;
Leonard C.K., Spellman M.W., Riddle L.,
Gregory T.J.;
"Assignment of intrachain disulfide bon
potential glycosylation sites of the ty
immunodeficiency virus envelope glycopr
Chinese hamster ovary cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: 91ycoprotein (GP120); Transmembrane glycoprotein ENV.
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P03375;
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21-JUL-1986
15-JUL-1999
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Josephs S.F., Doran E.R., Rafalski JA., Whitehorn
Baumeister K., Ivanoff L., Petteway S.R. Jr., Pears
Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.
Wong Staal F.;
"Complete nucleotide sequence of the AIDS virus, HT
Nature 313:277-284(1985).
J. Biol.
                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE=85111123; PubMed=2578615;
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NCBI_TaxID=11678;
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159; PubMed=2355006;
Spellman M.W., Riddle L., Ha
  265:10373-10382(1990)
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                    Score 178; DB Pred. No. 5.4e 2; Mismatches
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                                       Length 867;
                                                             CRC64;
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Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.R.
Baumeister K., Ivanoff L., Petteway S.R. Jr., Pearson M
Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T.,
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987 (Rel. 05, Last sequence update)
987 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains: Exterior membrane
polyprotein (GP120); Transmembrane glycoprotein (GP41)].
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MEDLINE-66218077; PubMed-2423250;

MEDLINE-66218077; PubMed-2423250;

MEDLINE-66218077; PubMed-2423250;

MEDLINE-66218077; PubMed-2423250;

MEDLINE-66218077; PubMed-2423250;

MEDLINE-66218077; PubMed-2423250;

Moderation B.H., Shaw G.M., McNeely P.D., Modrow S., W. P., Josephs S.F., Gallo R.C., Wong-Staal F. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F. Walley B. Parks E.S., Parks W.P., Josephs B. Parks W.P., Parks W.P., Josephs B. Parks W.P., Park
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NCBI_TaxID=11701;
                  InterPro; IPR000328; InterPro; IPR000777;
                                                                  HIV; M17451;
                                                                                    EMBL; M17451; AAA45057.1;
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                                                                                                                           s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way ified and this statement is not removed. Usage by and for commercial ities requires a license agreement (See http://www.isb-sib.ch/announce/send an email to license@isb-sib.ch).
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pe polyprotein GP160 preco-
totein (GP120); Transmemb
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GP160 precursor [Contains: Exterior:
Transmembrane glycoprotein (GP41)].
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                                               pl2489;
01-0CT-1989 (Rel. 12, Created)
01-0CT-1989 (Rel. 12, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane
glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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NCBI_TaxID=11694;
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                                    virus type 1
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HIV; M17450; ENVSSC.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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01-NOV-1988
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Gurgo C., Guo H.-G., Franchini G., Aldovini I
Farrell K., Wong-Staal F., Gallo R.C., Reitz
"Envelope sequences of two new United States
Virology 164:531-536(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM
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Viruses; Retroid viruses;
NCBI_TaxID=11702;
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: E
glycoprotein (GP120); Transmembrane glycoprotein
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01-NOV-1988 (Rel.
15-JUL-1999 (Rel.
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R.C., Restes HIV-1 isolates.";
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MEDILIND=86218077; PubMed=2423250;
MEDILIND=86218077; PubMed=2423250;
Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D.,
Starcich B.R., Hahn B.H., Josephs S.F., Gallo R.C., '
Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., '
Tidentification and characterization of conserved
"Identification and characterization of conserved"
The envelope gene of HTLV-III/LAV, the
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P31872;
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Pfam;
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01-JUL-1993 (Rel. 26, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoproteir
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SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                          regions in AIDS.";
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
                                                                                                                                                                                                                                                           InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=31678;
                                                                                                                                                                                                                                                                                                                             -!- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A
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EMBL;

AIDS; C Signal. SIGNAL

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collaboration - contstation outstation in no way commercial

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of

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_HVIS3
_ENV_HVIS3
_P19549;
_P19549;
_T 01-FEB-1991 (Rel. 17, Crea.
DT 01-FEB-1991 (Rel. 40, Last
nT 16-OCT-2001 (Rel. 40, Last
nT rvelope polyprotein GP1
_rvelope (GP120); T:
        Human immunodeficiency virus
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InterPro; IPR000777; GP120.
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Pfam; PF00517; GP41; 1.
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license@isb-sib.ch).
                                                     GP160 precursor
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n (GP41)].
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NCBL_TaxID=11690;

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SEQUENCE FROM N.A.

MEDILINE-90317906; PubMed=23
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                                                                  CARBOHYD SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=90317906; PubMed=2370688; York-Higgins D., Cheng-Mayer C., Bauer D., "Human immunodeficiency virus type 1 cellul replication, and cytopathicity are linked the viral genome.";
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    Similarity 94.4
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64:4016-4020(1990).
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Envelope polyprotein GP
glycoprotein (GP120); T.
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 Pfam;
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                                                                                                      or send
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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es; Retroviridae; Lentivirus.
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                glycoprotein ENV.
                                                                                                            Koyanagi S., Chen I.S Submitted (DEC-1988)
                                                                                                                                                                                   Human immunodeficiency Viruses; Retroid viruse Viruses; Retroid viruse V
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999 (Rel. 38, Last annotation update)
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poliprotein GP120); Transmembrane glycoprotein
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es; Retroviridae; Lentivirus.
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  DB
ENV_HV1A2
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ALIGNMENTS

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envelope protein gp120/gp41 - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 12 C;Accession: S22000
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Ridues: 1-33,'X',335-358 <STE2>
Ridues: 1-333,'X',335-358 <STE2>
C;Superfamily: type E retrovirus env polyprotein
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A;Description: Distinct populations of HIV-1 in blood and cerebrospinal fluid as determ
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A;Title: Distinct populations of human immunodeficiency A;Reference number: $70417; MUID:92144209; PMID:1736940
A;Accession: $70418
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                                                                                                                                                                                                           envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patient 3B) C;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: patient 3B
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A;Description: Distinct populations of HIV-1 in blood and cerebrospinal fluid
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A; Molecule
                                           A; Reference number: A; Accession: S70417
                                                                   R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency virus type 1 in blood and A;Reference number: S70417; MUID:92144209; PMID:1736940
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Best Local Similarity
                                                                                                                                                               Date: 19-Mar-1997 #sequence_revision 25-Apr-1997 #text_change 26-Aug-1999 Accession: S70417
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Accession: S22000
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Residues: 1-358 <STE1>
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Residues: 1-358 <STE>
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pperfamily: type E retrovirus env polyprotein
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Pred. No. 1.3e-13;
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C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999
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Search completed: May 16, Job time: 12.1446 secs
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A; Residues: 1-851 <CAR>
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C;Superfamily: type E retrovirus env polyprotein
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Best Local :
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Best Local Similarity 86.1%;
Matches 31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140 YTSLIYTLIEESQNQQEKNEQDLLELDKWDSLWNWF 175
                                                                                 633 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
nes 31; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                       YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88.9%;
                       2003, 11:25:05
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                                                                                                                                                               4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 176; DB 2;
Pred. No. 1.3e-13;
3; Mismatches 2;
                                                                                                                                                               Score 176; DB 2;
Pred. No. 3.4e-13;
4; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 358
                                                                                                                                                                                                    Length 851;
                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                 Gaps
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to the

EMBL Data Library, July

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C;Superfamily: type E retrovirus env polyprotein (2;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immu F:1-251/Product: coat protein gpp20 (fragment) #status predicted < F:252-443/Product: coat protein gpp41 (fragment) #status predicted F:424-443/Domain: transmembrane #status predicted <TMN> F:9.23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,36
                                                                                                                                                                                                                                                                                                                                                                                                    R; Burger, H.; weiser, T.; R; Burger, H.; weiser, T.; R; Burger, H.; weiser, T.; R; Burger, H.; weiser, R; Burger, H.; weiser, R; Burger, H.; weiser, R; Burger, H.; weiser, R; Burger, R; Burger, R; Burger, R; Burger, R; Willist R; 
                                                                                                                                                                                                                                                                      A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; PID:g555015 A;Note: this virus was isolated from the mother's sexual partner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N;Alternate names: coat polyprotein N;Contains: amino end of coat protein gp41; carboxyl end C;Species: human immunodeficiency virus type 1, HTV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: DNA
A;Residues: 1-222,'X',224-358 <STE2>
A;Cross-references: EMBL:X61359; NID:g60182; PIDM
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                         A;Gene: env
                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
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                                                                                                                                                                                                                                                                                                                                       A; Residues: 1-443 <BUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, P.N.; Gibbs, R.A. Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Note: host Homo sapiens (man)
C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
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A; Variety: isolate 28
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C; Superfamily: type E
                                                                                                                                                                                                                                              Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Accession: C41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Reference number: S21990
Accession: S21998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YTSLIYTLIEQSQNQQEKNEQELLELDKWASLWNWF 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YTNIIYTLLEQSQNQQEKNEQELLELDKWASLWTWF 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
33; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human immunodeficiency virus type 1 (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  retrovirus
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populations of HIV-1 in blood and cerebrospinal fluid
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Pred. No. 2
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   203,351,356,365,377/Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 358;
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A; Title: Idenci...
A; Reference number: A24//.,
A; Reference A247/4
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A; Molecule type: DNA
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A; Molecule type: GB: K03455; GB: M38432; NID: g1906382
--->residue forences: GB: K03455; GB: M38432; NID: g1906382
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C; Superfamily: tyl
C; Keywords: coat I
F; 1-29/Domain: si
F; 30-501/Product:
                                                                                                                                                   A; Note: submitt C; Superfamily:
                                                                                                                                                                                         A;Cross-references: EMBL:X61354; A;Experimental source: patient L
                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-357 <ST2>
                                                                                                                                                                                                                                                                                    A; Reference number: A; Accession: S70420
                                                                                                                                                                                                                                                                                                      AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A; Title: Distinct populations of human immunodeficiency
A; Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                        R;Steuler, H.;
                                                                                                                                                                                                                                                                                                                                                                            C;Species: human immunodeficiency virus C;Date: 20-Feb-1995 #sequence_revision C;Accession: S70420; S22006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C: Keywords: Coat protein; glycoprotein; polyprotein; transmembran F;1-29/Domain: signal sequence #status predicted <SIG> F;30-501/Product: coat protein gp120 #status predicted <GP1> F;502-847/Product: coat protein gp41 #status predicted <GP2> F;87,134,140,151,155,183,197,234,241,262,276,289,295,331,338,354,
                                                                                                                                                                                                                                                               A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                    envelope protein gp120/gp41 - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Accession: A24774
R; Starcich, B.R.; Hahn,
Cell 45, 637-648, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1988 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N; Contains:
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                                                                                             Local Similarity
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                                     Н
                                                                                                                                                                     submitted to the EMBL Data Library,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                   YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF
YTDLTYTLTEESQNQQEKNEQELLALDKWANLWNWF 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                     type E retrovirus
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                                                                           Conservative
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                                                                                           88.9%;
86.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        characterization of conserved and variable regions {\tt MUID:86218077;\ PMID:2423250}
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                                                                                                                                                   env polyprotein
                                                                                                                                                                                                           NID: g60190;
                                                                                           Score 176; DB 2; Pred. No. 1.3e-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 180;
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Pred.
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м.;
                                                                           Mismatches
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امر 5.
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                                                                                                                                                                       July
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                                                                                                                                                                                                           PIDN:CAA43620.1;
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.3e-14;
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envelope protein gp120/gp41 - human immu
C;Species: human immunodeficiency virus
A;Variety: isolate 27B
C;Date: 20-Feb 1995 #sequence_revision 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    env protein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
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                                                                                                                                           Дb
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C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-1997
C;Accession: B28922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         env polyprotein precursor - human in N; Alternate names: coat polyprotein
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                                                                      S21994
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Virology 164, 531-536, 1988
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A; Residues: 1-847 <OBR>
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Best Local
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sidues: 1-861
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l Similarity 91.7%;
33; Conservative
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33; Conserv
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#sequence_revision 20-Feb-1995 #text_change 01-Dec-2000
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                                                                                                                                                                                                                               93.4%;
91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of two new United States HIV-1 isolates MUID:88219542; PMID:3369091
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                                 human immunodeficiency virus ency virus type 1, HIV-1
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Pred. No. 2.8e-14;
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Pred. No. 2.9e-14;
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              A; Molecule type: DNA
A; Residues: 1-357 <ST2>
A; Cross-references: EMB
                                                                                       A; Reference number: A; Accession: S70424
                                                                                                                                                                                                                                                    S21992
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                                                                                                                         A; Title: Distinct populations of human
   A; Experimental source:
                                                                      A; Status: preliminary
                                                                                                                                           AIDS Res. Hum. Retroviruses 8,
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A;Cross references: EMBL:X61355; NID:g60179; PIDN:CAA43622.1; PID:g60180 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus type 1 in k A;Reference number: S70417; MUID:92144209; PMID:1736940 A;Accession: S70421
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R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991
A;Description: Distinct populations of HIV-1 in blood A;Reference number: S21990
A;Accession: S21994
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A;Residues: 1-140,'X',142-312,'X',314-357 <STE2>
A;Cross-references: EMBL:X61355; NID:g60179
C;Superfamily: type E retrovirus env polyprotein
                                          envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patient C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999 C;Accession: S70424; S21992
                 R;Steuler, H.;
                                                                                                                                                                                                                                                                                                                                                                                                                         A; Note: submitted to the EMBL Data Library, July C; Superfamily: type E retrovirus env polyprotein
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A; Residues: 1-357 <ST2>
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A; Accession: S70422
A; Status: preliminary
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A; Title: Distinct populations of human immunodeficiency
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C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
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A; Residues: 1-357 <STE1>
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Best Local
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                                                                                                                                                                                                                                                                                                                                                           Similarity
Storch-Hagenlocher, B.; Wildemann, Retroviruses 8, 53-59, 1992
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91.7%;
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91.78;
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EMBL: X61358; NID: g60177; PIDN: CAA43628.1; PID: g60178

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198
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A;Cross-references: EMBL:U63632; NID:gl465777; C;Genetics:

PID:g1465781

A;Gene: env C;Superfamily: type E

retrovirus env polyprotein

A; Reference number: Z16673 A; Accession: T09448 A; Status: preliminary; translated

from GB/EMBL/DDBJ

A; Molecule type: DNA A; Residues: 1-847 < PAN>

Akashi, T.; O'Brien, W.A.; Chen, I.S.; Koyanagi, Y.; Library, July 1996

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RESULT T09448

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QY 1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36	Query Match 100.0%; Score 198; DB 1; Length 855; Best Local Similarity 100.0%; Pred. No. 7.9e-16; Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	roprotein #st protein #st 2,298,304, drate (Asr	A;Gene: env C;Superfamily: type E retrovirus env polyprotein C;Superfamily: type E retrovirus env polyprotein; C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp F:1-30/Domain: signal sequence #status predicted <sig></sig>	A;Molecule type: DNA A;Residues: 1-855 <san> A;Cross-references: GB:K02007; NID:g328658; PIDN:AAB59882.1; PID:g328666 C;Genetics:</san>	A;Title: Nucleotide sequence and expression of an AIDS-associated retrovirus (ARV-2). A;Reference number: A04003; MUID:85090453; PMID:2578227 A:Accession: A03076	C;Accession: A03970 R;Sanchez-Pesador, R.; Power, M.D.; Barr, P.J.; Steimer, K.S.; Stempien, M.M.; Brown Science 227 484-492 1985	C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999 C:Occession: 0.03076	RESULT 1 VCLJA2 VCLJA2 env polyprotein precursor - human immunodeficiency virus type 1 (isolate ARV-2) N.Alternate pames: Coat columnities	ALIGNMENTS	4 86 43.4 151 2 S30,448 env protein - hu 5 86 43.4 151 2 S30452 env protein - hu	1 87 43.9 881 2 87 43.9 881 3 87 43.9 889	9 133 67.2 877 2 S49197 envelope 0 124 62.6 863 2 A53034 gag polyr	156 78.8 854 1 VCLJSI 7 150 75.8 856 1 A44963 env polyprotein g 8 146 73 7 357 2 S21990 envelope protein	4 162 81.8 136 2 JU0266 envelope polypro 5 162 81.8 136 2 JT0954 envelope polypro	3 856 1 VCLJVL env 3 868 1 VCLJH4 env 8 859 2 T01672 enve	0 167 84.3 846
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AAY89136;

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The invention relates to hybrid polypeptides comprising enhancer peptide consequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (9941) protein sequences, comparisally from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the polypeptide that they are linked to. The enhancer peptides enhance the polypeptide that may be introduced into a living system and that can core polypeptide as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides context factor, cytokine, differentiation factor, colony stimulating factor, hormone or complyeenic factor. The peptides of the invention can be used for confibiting viral infection and can be used in anti-viral and core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends confirm by the factor comparise enhancer fragments at terminal ends
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Best Local Similarity 97.2

Matches 35; Conservative 1 YTGLIHSLIEESQNQOEKNEQELLELDKWASLWNWF 36 97.0%; 97.2%; 0; Score 191; DB 21; Pred. No. 3e-17; 0; Mismatches 1; 1; Indels 0; Gaps

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A new hybrid polypeptide with enhanced comprises enhancer sequence -
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                                                                                                                                                      polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
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                                     \vdash
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                     YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Guthrie KI,
                                                                          Conservative
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                                                                                                                                                AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide;
                                                                                           97.0%;
97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36
                                                                                         Score 191; DB 2
Pred. No. 3e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                573
                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Anwer MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pharmacokinetic properties
                                                                                                          21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lambert DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          envelope protein;
                                                                                                          Length
                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytokine; viral;
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                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
or the gp41 core 6 helix bundle, which is formed by the interaction of the N- and C-helical domains of three gp41 proteins. The peptides can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be multimerised. For example, N- and C-helical domain peptides can be alternately linked together to form a peptide which mimics the core 6-helix bundle. Administration of the peptide(s) generates a humoral response, with the production of antibodies against gp41 structures involved in viral entry. As these portions of gp41 are well conserved, such antibodies may be effective against a broad range of
                                                                                                                                                                                      sequences AAB14532-B14534 and AAB14569-B14602 represent specifically claimed peptides derived from the C-helical domain of the gp41 envelope glycoprotein from a variety of HTV-1 isolates. The invention relates to raising a neutralising antibody response to a broad spectrum of HTV (human immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or mimic the coiled coil solution structure of the N-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), and the coiled coil solution structure of the N-helical segment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gp41 transmembrane-proximal amphipathic alpha-helice
core 6-helix bundle; viral entry inhibition; immunoc
antibody; humoral response; broad spectrum vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Raising neutralizing antibody response to human immunodeficiency comprises administering a polypeptide capable of forming a stable coiled-coil solution structure -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wild
                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-465959/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JAN-1999; 99US-0115404.
07-JAN-2000; 2000US-0480336.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   envelope glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIV-1 isolate LAI gp41 C-helical domain residues 643-678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24 - NOV - 2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB14533 standard; peptide; 36 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (WEIS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (WILD/) WILD C T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CT,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gp41 C-helical domain;
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35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WEISS C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Weiss CD
                                                                                                                                                                                                                                                                                                                                                                                                                            Page 12; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prophylaxis; therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amphipathic alpha-helical segment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 191; DB 2
Pred. No. 3e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunogenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunodeficiency virus,
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RESULT 12
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PD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV strains and isolates. The peptide compositions may be administered as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect uninfected cells. A composition comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV
                                                                                                                                                                                                       The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core
           inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                   selected from a growth factor, cytokine, differentiation factor, interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for
                                                                                                                                                                                                                                                                                                                                                        A new hybrid polypeptide with enhanced comprises enhancer sequence -
                                                                                                                                     polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bloactive peptides
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-136792/12
                                                                                                                                                                                                                                                                                                                                                                                                                                               Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Retrovirus; hybrid polypeptide; enhancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Core polypeptide fragment T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                    Disclosure; Page 21; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAY-1999;
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35; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                      sequence
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97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Merutka G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hormone; angiogenic factor.
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Pred. No. 3e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Anwer MK,
                                                                                                                                                                                                                                                                                                                                                                      pharmacokinetic properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gp41; envelope protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Lambert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 36;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               DX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytokine; viral;
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   interacts with members of the formyl peptide receptor (FPR) family a thereby up-regulates an inflammatory response, and acts as a potent chemoattractant, and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                                                                                  AAB52688 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178
                        Wang JM,
                                                                        05-MAY-1999;
                                                                                                                                                                     Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                     23-FEB-2001
                                                                                                                                                                                                                                                                                              AAB52688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 12; Page 24; 148pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human immunodeficiency virus type
                                                                                                                                                                                                                    Antiinflammatory;
                                                                                                                                                                                                                                            T20/DP178 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-NOV-2000
                                                                                                                                                                                                       Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (USSH ) US DEPT HEALTH & HUMAN
                                                                                                                                                                                                                                                                                                                                                                                            1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                               YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                               35;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                     Oppenheim JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oppenheim JJ,
                                             DEPT HEALTH & HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                               2000WO-US12371
                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ΑA;
                                                                       9905-0132686
                                                                                                                                                                                                                                            fragment #66.
                                                                                                                                                                                                                                                                                                                                                                                                                                         97.0%;
97.2%;
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                      s
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 191; DE
Pred. No. 3e-1
0; Mismatches
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                      Gong W,
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                                                                                                                                                                                                       inflammatory response up-regulation;
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                      Murphy PM;
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                                                     The present sequence is a peptide fragment of T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41 T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain gp41 plays a critical role in the fusion of HIV-1 and host cell membranes T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes
                                                                                                                                                                                                                                                                                            Claim 14;
                                                                                                                                                                                                                                                                                                                                                     Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-656493/63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178
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(but not T coinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (USSH ) US DEPT HEALTH & HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammatory response in a subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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35; Conser
                       T cells).
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The present peptide can 
nse in a subject.
                                                                                                                                                                                                                                                                                                                                                  to modulate inflammation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JJ,
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97.2%;
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                             be used to modulate an
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Дb
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                                                                                                                                                                                                                                           The present sequence represents an N- and C-terminal modified peptide, designated T-20 (or DP-178), corresponding to amino acids C38-673 of the transmembrane protein gp41 of HIV-1 LAI isolate.

CC The invention relates to methods for the synthesis of peptides. The invention relates to methods for the synthesis of peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected CC T-20 or T20-like peptide, followed by deprotection of the side CC chains to yield the final T-20 or T-20-like peptide. The invention CC also relates to individual peptide fragments (see AAY31956-73) which CC act as intermediates in the synthesis of peptides of interest (e.g. CT-20), and to particular groups of peptide fragments which act as CC intermediates in the synthesis of the peptide of interest. The contribute of the large scale, economical production of high
                                                                                                                    Best Loc
Matches
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                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Methods
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01-MAY-1998;
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
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                                                                                                                                                                                                                                                                                                 purity peptides.
                                                                                                                                                Local Similarity
\vdash
                               YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ods of peptide synthesis, like peptides -
   YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TRIMERIS INC.
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                                                                                                                                                                                                                                           36 AA;
                                                                                                                       Conservative
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98US-0071877
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                                                                                                                                                97.0%;
97.2%;
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                                                                                                                                                Score 191; DB 2
Pred. No. 3e-17;
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                                                                                                                       Mismatches
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RESULT 7 AAY31974

Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response up-regulation; chemoattractant.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents a peptide, designated T-20 (or CDP-178), that corresponds to amino acids 638-673 of the crammembrane protein gp41 of HIV1 LAI isolate. The invention CC transmembrane protein gp41 of HIV1 LAI isolate. The invention CC relates to methods for the synthesis of peptides, in particular CC relates to methods for the synthesis of peptides, in particular CC relates to method synthesizing specific side-chain protected CC peptide fragment intermediates (see AAY31955-73) of T-20 or a CC regiments in solution to form a protected T-20 or T20-like peptide on a solid support, coupling the protected CC followed by deprotection of the side chains to yield the final T-20 CC or T-20-like peptide. The invention also relates to individual CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide of interest. The method allows for the large scale,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                            AAB52655;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-591038/50
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01-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T-20; DP-178; HIV-1 LAI; gp41; peptide synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV-1 LAI gp41 T-20 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY31974 standard; Peptide; 36
                                                                                                            T20/DP178 peptide fragment #33.
                                                                                                                                                                    23-FEB-2001
                                                                                                                                                                                                                                                                                 AAB52655 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          economical production of high purity peptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                           Н
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                                                                                                                                                                                                                                                                                                                                                                                                                           YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 Similarity
35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          вгау В,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                    (first entry)
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98US-0071877.
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                                                                                                                                                                                                                                                                                 Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97.0%;
97.2%;
                                                                                                                                                                                                                                                                                    36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 191; DB 2
Pred. No. 3e-17;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mader C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 20;
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RESULT 4 AAY22912

AAY22912 standard; Peptide;

36

SEQ ID NO. 19-AUG-1999 AAY22912;

108

from W09820036

(first entry)

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                                                                                                                                                                                                                                               Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus C (HIV). Specifically, AAY22810-Y22910 are derived from 9p41 proteins of known HIV virus strains (AAY22810, AAY22880, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the 9p41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of USA of the constrained helical peptides are in affinity purification. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily
                                                                                        Query Match
Best Local :
                                                                     Matches
                                                                                                                                                                        available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable forms of "floppy" peptides or proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 233-234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV: gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Braisted A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-MAY-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9820036-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GETH ) GENENTECH INC.
YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                       35;
                                                                                        Similarity
                                                                                                                                               36 AA
                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0876698.
96US-0743698.
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                                                                                      97.0%;
97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  279pp; English.
                                                                    Pred. No. 3e-]
0; Mismatches
                                                                                 Score 191; DB 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phelan
                                                                                                         DB 19; .Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JC,
                                                                       Indels
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1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

36

Query Match Best Local S Matches 35

Similarity 35; Conser

Conservative

97.0%; 97.2%;

Score 191; DB 1 Pred. No. 3e-17; 0; Mismatches

DB 19;

Length 36 Indels

0;

Gaps

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RESULT 5
AAY22805
ID AAY2
XX AAY2
XX AAY2
XX AAY2
XX AY2
XX AY2
XX AY2
XX HIV;
KW VACC
KW 114g
XX W 1MM
XX W 114g
XX W 105-1
XX D1s
XX 
                                                                                                                                                                                                                                                                                                                                                                                                  constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus (HIV). Specifically, AAY22810-Y22910 are derived from 9p41 proteins of known HIV virus strains (AAY22810, AAY22871, AAY22888 and AAY22903 represent consensus sequences of various sections of the 9p41 protein). Sequences derived from the peptides are used to produce
                                                                                                 available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for of synthetic antibody clones from phage display libraries, or
                                                                                                                                                                                                                                                                                                    infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention
   Sequence
                                                                                                                                                                                                      of ligands (particularly where complete binding protein is not readily
                                                                                                                                                                                                                                      HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 143-144; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Braisted A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO. 1 from WO9820036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY22805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY22805 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9820036-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunoglobulin purification; epitope mimic.
                                                                  of "floppy"
      36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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96US-0743698.
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                                                                     peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    McDowell RS,
                                                                         or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36
                                                                  proteins.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Starovasnik MA;
                                                                                                                                           for
                                                                                                        or
                                                                                                        as stable
                                                                                                                                           isolation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR98398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                            Barney SO, b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR64364 is designated DP-178, and corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein protein interactions, and possess anti-viral activity. Homologues of these peptides were identified by a computer assisted peptide sequence search. The peptides inhibits transmission to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       assisted peptide sequence search. The peptides inhibits transmission to uninfected cells, and can also be used as type and/or subtype specific
          Disclosure;
                                    Inhibiting viral transmission, e.g. HIV or isolated peptide recognised by an ALLMOTI5, sequence search motif
                                                                                       WPI; 1996-309517/31.
                                                                                                                                                                                          06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                                                                   W09619495-A1
                                                                                                                                                                                                                                                                                                          Human immunodeficiency
                                                                                                                                                                                                                                                                                                                                                   Antifusogenic ALLMOTIS; 107;
                                                                                                                                                                                                                                                                                                                                                                                      DP178 corresponds to residues 638-673 of HIV-1(LAI) gp41
                                                                                                                                                                                                                                                                                                                                                                                                                  17-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR98398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR98398 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Computer search generated synthetic peptides -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1995-036105/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Barney SO,
Petteway SR,
                                                                                                                                                                                                                                                        27-JUN-1996
                                                                                                                                                                                                                                                                                                                                     influenza virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYDU-) UNIV DUKE
                                                                                                                                                                                                                              20-DEC-1995;
                                                                                                                                                    (UYDU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    l Similarity
35; Conserv
                                                                                                                                                    TRIMERIS INC
UNIV DUKE.
                                                                                                                                                                                                                                                                                                                                 enic activity; antiviral capability; coiled-coil pe
107x178x4; PLZIP search motif; viral transmission;
virus; hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tools.
          Fig
                                                                                                              Bolognesi DP,
, Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bolognesi DP,
Wild CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA;
                                                                                                                                                                                          95US-0470896
94US-0360107
                                                                                                                                                                                                                              95WO-US16733
          <u>بر</u>
         471pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.0%;
97.2%;
                                                                                                                                                                                                                                                                                                         virus type
                                                                                                              Lambert DM,
Wild CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lambert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 191;
Pred. No. 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                                          Langlois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 16;
                                                RSV, to a cell - using , 107x178x4 or PLZIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                are inhibitors of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŢŢ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36;
                                                                                                                                                                                                                                                                                                                                                 peptide;
on; HIV;
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В γ

YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

36

Matches

Local Similarity les 35; Conserv

Conservative

Mismatches

0;

Gaps

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RESULT 3
AAW17011
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Query Match
Best Local
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                                                                      ARWI7011 represents a peptide designated DP-178, a peptide derived from HTV type 1 glycoprotein 41 (gp41) transmembrane protein. The peptide corresponds to residues 638-673 of gp41. DP-178 and its derivatives are used in combination with a therapeutic agent, e.g. a reverse transcriptase, viral protease, cytokine, glycosylation or viral mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting transmission. They may also be used in vaccines for protecting against HTV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequences given in AAR98398-408 represent peptides which exhibit antifusogenic activity, antiviral capability and/or the ability to modulate intracellular processes involving coiled-coil peptide structures. These peptides are recognised by the ALLMOTIS, 107x178x4 and PLZIP search motifs. These peptides may be used to inhibit the transmission of a virus, pref. HIV, influenza virus, or hepatitis B virus, to a cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HIV; SIV: human; simian immunodeficiency virus; transmembrane; antiviral; DP-178; DP-107; vaccir replication; transmission.
                                             Sequence
                                                                                                                                                                                                            Claim 2;
                                                                                                                                                                                                                                      therapeutic agent - useful for treatment of HIV infection, inhibiting replication or transmission of {\tt HIV}.
                                                                                                                                                                                                                                                                      Compsns. contg. DP-178 or DP-107 in combination with other
                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HIV-1 derived peptide useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                     WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                               (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                           06-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human immunodeficiency virus type 1 LAI isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW17011 standard; peptide;
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35; Conser
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                                                                                                                                                                                                            Figure 1; 84pp; English
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97.2%;
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97.2%;
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Pred. No. 3
Score 191; DB 1
Pred. No. 3e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for treatment of HIV infection.
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               DB 18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vaccine;
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Result
No.
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Perfect score:
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Maximum DB seq length: 200000000
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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Maximum Match 100%
Listing first 45 summaries
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AAY22805
AAY31955
AAY31974
AAB52655
AAB52688
                    AAB52818
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HIV-1 derived pept
SEQ ID NO. 1188 from
SEQ ID NO. 1 from
Synthetic peptide
HIV-1 LAI gp41 T-2
T20/DP178 peptide
T20/DP178 peptide
T20/DP178 peptide
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DP178 corresponds
HIV-1 derived pept
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ALIGNMENTS

AAR64364 RESULT 1 07-JUN-1993; antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI; human immunodeficiency virus; transmembrane protein; gp41; alpha helix; leucine zipper; DP-185. 07-JUN-1994; DP-178 derived from HIV-1 isolate LAI has antiviral activity. AAR64364; AAR64364 standard; Peptide; 36 WO9428920-A Synthetic 24-AUG-1995 (first entry) 22-DEC-1994 Modified-site Modified-site 9308-0073028 94WO-US05739 38 /note= "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic or, macromolecular carrier gp. attached" Location/Qualifiers /note= "optionally has a or macromolecular AΑ carboxyl, amido, hydrophobic carrier gp. attached"

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Sequence 82, Application US/10059271
Sequence 82, Application US/10059271
Fublication No. US20030082208A1
GENERAL INFORMATION:
APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKIARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: BEING IMMOBILIZED
FILE REFERENCE: ALBRE-22
CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT APPLICATION NUMBER: 0201-02-02
PRIOR FILING DATE: 2001-02-02
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 8:
LENGTH: 254
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                                                                                                                                                                                                                                                                                                   CTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: peptide
US-10-059-271-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: Synthetic: OTHER INFORMATION: peptide US-10-059-271-82
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                                                                                                                                                                                                                                                                                                                                                                                              uery Match 100.0%; Score 179; DB 9; Length 232; est Local Similarity 100.0%; Pred. No. 3.8e-14; tches 33; Conservative 0; Mismatches 0; Indels
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                                  CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: Patentin Ver. 2.1
LENGTH: 232
BEING IMMOBILIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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Best Local Similarity 100.
Matches 33; Conservative
                   ILE REFERENCE: ALBRE-22
TITLE OF INVENTION:
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US-10-059-271-82
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169 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 201

Search completed: May 16, 2003, 12:10:24 Job time : 15.4458 secs THIS PAGE BLANK (USPTO)

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Title:
Perfect score:
Sequence:
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Makimum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq
  length: 0
length: 2000000000
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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Gapop 10.0 ,
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195
1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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  GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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 VCLJTV
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VCLJH3
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RESULT VCLJH3

Qγ

B

Query Match 99.0%; Score 193; DB 2; Length 854; Hest Local Similarity 97.2%; Pred. No. 3.3e-15; Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps	RESULT 2 S13288 env protein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-199 C;Accession: S13288 R;O'Brien, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, A.; Idler, Nature 348, 69-73, 1990 A;Title: HIV-1 tropism for mononuclear phagocytes can be determined by reg A;Reference number: S13288; MUID:91043044; PMID:2172833 A;Accession: S13288 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-854 <obr> C;Superfamily: type E retrovirus env polyprotein</obr>	Query Match 99.0%; Score 193; DB 2; Length 851; Best Local Similarity 97.2%; Pred. No. 3.3e-15; Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps Qy 1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36 :	octein - human immunodeficiency virus type 1 : human immunodeficiency virus type 1, HIV-1 3-Mar-1997 #sequence_revision 19-Mar-1997 #text_chang on: S33985 F. to the EMBL Data Library, November 1991 ce number: S33979 on: S33985 pn: S33985 pn: S33985 stype: mRNA s: 1-851 <car> siterences: EMBL:Z11530; NID:g60192; PIDN:CAA77628.1; nily: type E retrovirus env polyprotein</car>	ALIGNMENTS	30 166 85.1 729 1 VCLJKX 31 166 85.1 861 1 VCLJKB 32 164 84.1 454 2 B41621 33 161 82.6 868 1 VCLJH4 34 158 81.0 136 2 JUO266 35 158 81.0 136 2 JUO266 36 151 77.4 856 1 A44963 37 150 76.9 854 1 VCLJSI 38 145 74.4 856 1 A44963 39 136 69.7 877 2 S21990 40 119 61.0 863 2 A53034 41 86 44.1 881 1 VCLJG3 42 86 44.1 881 1 VCLJG5 43 86 44.1 881 2 S03068 45 85 43.6 151 2 S30448 45 85 43.6 151 2 S30448 45 86 43.6 151 2 S30452
ps 0;	1997 .er, K.; Zack, regions of gpl	. O;	1999		protein pr protein pr protein b protein - polyprote polyprote polyprotein pr protein pr protein pr protein - protein - protein - protein - protein - protein - huma protein - huma protein - huma

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env polyprot
N;Alternate
C;Species: h
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env polyprotein P
N; Alternate names:
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Nature 313, 277-284, 1985
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C;Accession: A03973
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Cell 40, 9-17, 1985
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C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
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                                                                                                                                                                                                                                                                                                                    F;31-516/Product: exterior membrane glycoprotein #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Species: human immunodeficiency virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;Title: Nucleotide sequence;Reference number: A90866; Naccession: A03975
                                                                                                                                                                                                                                                                                                                                     Superfamily: type E retrovirus env polyprotein; Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; 1-30/Domain: signal sequence #status predicted <SIG>
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Keywords: AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genetics:
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Best Local
                                                                                                                                                                                                                                                             :517-861/Product: transmembrane glycoprotein #status predicted <TMM>
:88,136,141,146,161,165,191,202,239,246,267,281,294,300,306,337,344,361,391,397,402,41
:616,621,630,642,679,755,821/Binding site: carbohydrate (Asn) (covalent) #status predi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pt2-856/Product: transmembrane glycoprotein #status predicted <TMM>
:88,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,406
:611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status predic
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Best Local
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bsidues: 1-861 <WAI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                   coss-references: GB:K02013; NID:g326417;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pperfamily: type E retrovirus env polyprotein
pywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency;
30/Domain: signal sequence #status predicted <SIG>
                                                                                                                 643
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                                                                                                                                                  YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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s: coat polyprotein
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human immunodef
oat polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.0%;
97.2%;
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97
               immunodeficiency
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           e of the AIDS virus,
MUID:85099333; PMII
                                                                                                                                                                                                        . 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 193;
Pred. No. 3.
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Pred. No. 3
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                 virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PMID:2981635
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PMID:2578615
                                                                                                                                                                                                                                                                                                                                                                                                                                   PIDN:AAB59751.1; PID:g326424
                                                                                                                                                                                                        DB 1;
.4e-15;
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                                                                                                                 678
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                 type
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                                                                                                                                                                                                                        Length 861;
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Gallo, R.C.;
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N;Contains: coat protein gp120; coat protein C;Species: human immunodeficiency virus type C;Date: 30-Sep-1988 #sequence_revision 30-Sep
                                                                        RESULT
VCLJ3W
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                                                    env polyprotein precursor -
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A; Gene: env
C; Superfamily: type E
C; Keywords: AIDS; cap
F; 1-30/Domain: signal
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A;Note: this virus was isolated from the mother's sexual partner
C;Genetics:
A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; immunodeficiency:
E;1-251/Product: coat protein gp120 (fragment) #status predicted <GP1>
E;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2>
E;424-443/Domain: transmembrane #status predicted <TMNN
E;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: A41621; MUID:92107924; PMID:1763038 A; Accession: C41621
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                                                                                                                                                                                                                                                                                                                                                                                                             A; Cross-references:
C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
C;Accession: A03974
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-856 < MUE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Reference number: A; Accession: A03974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Title: Nucleic acid structure and expression of the PA; Reference number: A93355; MUID:85111157; PMID:2982104
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A; Residues: 1-443 <BUR>
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Nature 313, 450-458, 1985
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                                                                                                                                                                                                 superfamily: type E retrovirus env polyprotein; (superfamily: type E retrovirus env polyprotein; differency: polyp; Keywords: AIDS; capsid protein; coat protein; differency: polyp; 1-30/Domain: signal sequence #status predicted <SIG>; 1-30/Domain: signal sequence #status predicted <EXTO; 31-511/Product: exterior membrane glycoprotein #status predicted <EXTO; 512-856/Product: transmembrane glycoprotein #status predicted <TMM>; 512-856/Product: transmembrane glycoprotein #status predicted <TMM>; 81,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397, 611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre
                                                                                                                           Query Match
Best Local :
                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
  638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
YTSLIHSLIEESQNQQEKNEQELLELDKWANLWNW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          precursor - human
                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 coat polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                     GB:K02083; NID:g555008; PIDN:AAB59873.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      D.H.; Cabradilla,
                                                                                                                           94.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94.4%;
                                                                                                                           Score 184;
Pred. No. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            coat protein; glycoprotein; immunodeficiency; polyp
20 (fragment) #status predicted <GPl>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-Dec-1993 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C.D.;
                                                                                                                           4e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1,
                                                                                                                                                   DB 1;
  672
                                                  35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .9e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Benton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nguyen,
                                                                                                   0;
                                                                                                                                                Length 856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human
                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C.V.; Lasky, L.A.; Capon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of coat protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P.N.; Gibbs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AIDS/lymphadenopathy
                                                                                                                                                                                                                                                                                                                                                                                                                                        PID: g328559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-Aug-1999
                                                                                                   0
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human immunodeficiency virus 120; coat protein gp41

type

type 1, HI 30-Sep-1988

HIV-1

#text_change

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C; Keywords: coat protein; glycoprotein; polyprotein; transmembran F;1-29/Domain: signal sequence #status predicted <SIG> F;30-501/Product: coat protein gp120 #status predicted <GP1> F;502-847/Product: coat protein gp41 #status predicted <GP2> F;87,134,140,151,155,183,197,234,241,262,276,289,295,331,338,354,
A; Molecule type: 1
A: Residues: 1-357
                                         A; Reference number: A; Accession: S21994
                                                                                                       R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, submitted to the EMBL Data Library, July 1991
                                                                                                                                           C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change C;Accession: S21994; S70421
                                                                                                                                                                                         envelope protein gpl20/gp41 - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 27B
                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Envelope sequences
A;Reference number: A28922;
A;Accession: B28922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: A24774; A; Accession: A24774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cell 45, 637-648, 1986
A; Title: Identification and
                                                                                A; Description: Distinct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Gurgo, C.; Guo, H.G.; Fra
Virology 164, 531-536, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N;Alternate names: coat polyprotein C;Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     env polyprotein precursor -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-856 <STA>
                                                                                                                                                                                                                                                                                                                                                     Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VCLJSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:K03455; GB:M38432; NID:g1906382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: DNA
A;Residues: 1-861 <GUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;Superfamily: type E retrovirus env polyprotein; keywords: capsid protein; coat protein; glycoprotein; polyprotein; ;1-29/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               :Keywords: coat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gene:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Starcich, B.R.; Hahn,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3-861/Product: env polyprotein #status predicted <EPP>
,129,135,140,143,159,163,187,198,234,241,262,276,295,301,302,333,340,356,362,386,39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              638 YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 673
                                                                                                                                                                                                                                                                                                                                                     643
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                          1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                     YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity 33; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           в28922
                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                             inct populations of $21990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Franchini, G.; Aldovini, A.; Collalti,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94.48;
91.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               94.48;
91.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ψ
                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 184; DB 1;
Pred. No. 4e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 184; DB 1;
Pred. No. 4e-14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                  in blood and cerebrospinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                              В.;
                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 861;
                                                                                                                              Hacke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and
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                                                                                                                                                                         01-Dec-2000
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                                                                                  fluid
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                                                         A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-357 <ST2>
                                                                                                                                              R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency A;Reference number: S70417; MUID:92144209; PMID:1736940
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                A;Cross-references: EMBL:X61356; NID:g60181; PIDN:CAA43624.1; A;Experimental source: patient 27L
                                                                                                                           A; Reference number: A; Accession: S70422
                                                                                                                                                                                                            R;Steuler,
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ç the he EMBL I

Data

PID:g1067129

virus

type

1 in blood and

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A:Status: preliminary
A:Molecule type: DNA
A:Molecule: type: DNA
A:Residues: 1-140,'X',142-312,'X',314-357 <STE2>
A:Cross-references: EMBL:x61355; NID:g60179
C:Superfamily: type E retrovirus env polyprotein
envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patient 27L)
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
C;Accession: S70422; S21996
                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency virus A;Reference number: $70417; MUID:92144209; PMID:1736940
A;Accession: $70425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 submitted to the EMBL Data Library, July 1991 A;Description: Distinct populations of HIV-1 in blood A;Reference number: S21990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  envelope protein gp120
C;Species: human immun
A;Variety: isolate 28
C;Date: 20-Feb-1995 #s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                        A; Cross-retered
C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-222,'X',224-358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X61355; NID:g60179; PIDN:CAA43622.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-358 <STE1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Accession:
R;Steuler, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: S70421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: S21998
                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                              Cross-reterences:
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                                                                                                                                                                          140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
les 32; Conserv
                                                                                                                                                                                                             1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-Feb-1995 #sequence_revision
                                                                                                                                                                      YTSLIYTLIEQSQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YTTLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H.; Storch-Hagenlocher, B.; Wildemann, B.;
                                                                                                                                                                                                                                                        32;
                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                      ces: EMBL:X61359; NID:g60182;
type E retrovirus env polyprot
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immunodeficiency virus
                                                                                                                                                                                                                                                        Conservative
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88.9%;
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                                                                                                                                                                                                                                                                              Pred.
                                                                                                                                                                                                                                                                                               Score 181;
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irus type 1, HIV-1
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                                                                                                                                                                                                                                                                                                                                        polyprotein
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                                                                                                                                                                                                                                                                                                                                                            PIDN:CAA43630.1; PID:g60183
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .4e-14;
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env polyprotein M - human immunodericiency virus cyro - . N;Alternate names: coat polyprotein N;Contains: amino end of coat protein gp41; carboxyl end N;Contains: aminodeficiency virus type 1, HIV-1
                                  A; Note: host Homo sapiens (man)
C; Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Gene: env
C; Superfamily: type E retrovirus
 R; Burger,
                                                                                                                                             A41621
                                                                                                                                                                                                                 Вþ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              env protein - human immunodeficiency virus type 1
C:Species: human immunodeficiency virus type 1, HIV-1
C:Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #t
C:Accession: S13289
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change
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                                                                                                                                                            RESULT 14
                                                                                                                                                                                                                                                                                                                                                       C;Superfamily:
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A; Residues: 1-847 < PAN>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references:
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Best Local
                    Accession: A41621
                                                                                                                                                                                                                                                                                                                                                                                                                      Title: HIV-1 tropism for mononuclear phagocytes can be deference number: $13288; MUID:91043044; PMID:2172833 rcession: $13289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         O'Brien, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, A.; Idler, K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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Residues: 1-847 <OBR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                 YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF 664
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             33;
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 Weiser,
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                                                                                                                         human immunodeficiency virus type 1 (fragment)
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 B.; Flaherty,
                                                                                                                                                                                                                                                                                                                                                       retrovirus env polyprotein
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91.7%;
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91.7%;
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Library, July 1996
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Pred. No. 1.6e-13;
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Pred. No. 4.
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K.; Gulla, J.; Nguyen,
                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                    Length 847;
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                                                                                      of coat protein
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 P.N.; Gibbs, R.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24 - Nov - 1999
                                                                                                                                                                                                                                                                                     0;
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                                                                                      gp120
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Search completed: May 16, Job time: 13.1446 secs

2003,

11:25:10

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A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; G;Superfamily: type E retrovirus env polyprotein; G;Superfamily: type E retrovirus env polyprotein; G;Superfamily: type E;1-30/Domain: signal sequence #status predicted <SIG>
E;31-509/Product: exterior membrane glycoprotein #status predicted <EXT>
E;31-509/Product: exterior membrane glycoprotein #status predicted <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; pol
F;1-253/Product: coat protein gp120 (fragment) #status predicted <GP1>
F;254-445/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;426-445/Domain: transmembrane #status predicted <TMN>
F;9,23,42,48,78,85,101,107,131,137,143,147,152,155,190,205,353,358,367,379/Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        c, superramily: type E retrovirus env polyprotein C; Keywords: AIDS; capsid protein; coat protein; ç E;1-253/Product: coat protein qp120 (frammar: "E;254-445 pandar: "
                                                 δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Science 227, 484-492, 1985
A; Title: Nucleotide sequence and expression of an AIDS-associated A; Reference number: A04003; MUID:85090453; PMID:2578227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Note: host Homo sapiens (man)
C; Date: 17-May-1985 #sequence_r
C; Accession: A03976
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VCLJA2
В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-855 <SA,N>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A; Title: Evolution of human immunodeficiency virus type I nucleotide sequence diversi
A; Reference number: A41621; MUID:92107924; PMID:1763038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: A03976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R; Sanchez-Pescador, R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:M77228; NID:g328627; PIC A;Note: this virus was isolated from the mother
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-445 <BUR>
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                                                                                                                                                                                                            F;610,624,636,815/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local :
                                                                                                        Matches
                                                                                                                                                                                                                                     510-855/Product: transmembrane glycoprotein #status predicted <TMM> 87,129,140,158,184,190,200,244,265,292,298,304,334,341,358,364,388,394,400,408,445
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                                                                                                                                                     Query Match
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Eglycoprotein (GP120); Transmembrane glycoprotein
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                                                Assignment of intrachain disulfide bonds and characterization of potential glycosylation sites of the type I recombinant human immunodeficiency virus envelope glycoprotein (gp120) expressed in Chinese hamster ovary cells.;
J. Biol. Chem. 265:10373-10382(1990).
                                                                                                                                       DISULFIDE BONDS, AND CARBOHYDRATE-LINKAGE MEDLINE-90285159; PubMed-2355006; Leonard C.K., Spellman M.W., Riddle L., Ha Gregory T.J.;
                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

MEDLINE-85111123; PubMed=2578615;

Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich B.R.,

Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A.,

Baumelster K., Ivanoff L., Petteway S.R. Jr., Pearson M.L.,

Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gallo R.,

Wong-Staal F.,

"Complete nucleotide sequence of the AIDS virus, HTLV-III.";

"Complete nucleotide sequence of the AIDS virus, HTLV-III.";
                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1 (BH10 isolate) Viruses; Retroid viruses; Retroviridae; Lentivirus NCBI_TaxID=11678;
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SWISS-PROT entry is copyright. It is sen the Swiss Institute of Bioinforma
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35; Conservative
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ENV_HV1H2 P04578; 009779;

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Envelope polyprotein GP160 precursor [Contains:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shaw G.M., Wong-Staal F., Reddy E.P.; "HTLY-III env gene products synthesized in antibodies present in the sera of AIDS paticell 41:979-986(1985).
                                                                                                                                                                                                                                                   Pfam; PF00516; Pfam; PF00517;
                                                                                                                                                                                                                                                               HIV; M14100; ENV$HXB3.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PP00516; GP120; 1.
                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch)
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the European Bioinformatics Institute.
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                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus type 1 (HXB3 isolate)
Viruses; Retroid viruses; Retroviridae; Lentivirus
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RESULT 5
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MEDLINE-95127297; PubMed-7826699;

MEDLINE-95127297; Hall L., Robert-Guroff M., Laute Shaw G.M., Kong L.I., Weiss S.H., Watters D., Ga "Viral variability and serum antibody response infected with HIV type 1 (HTLV type IIIB).";

AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                             Human immunodeficiency vi)
Viruses; Retroid viruses;
NCBI_TaxID=82834;
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                               EMBL; U12055;
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36, Last sequence update)
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ein GP160 precursor [Contains: E
20); Transmembrane glycoprotein
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P03377:
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein (GP120); Transmembrane glycoprotein
glycoprotein (GP120); Transmembrane glycoprotein
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InterPro; IPR000777; GP120.
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EMBL; A04321; CAA00352.1; --
PIR; A03975; VCLJIV.
HIV; K02013; ENV$BRU.
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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InterPro; IPR000777; GP120.
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Nature 313:450-458(1985)
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NCBI_TaxID=11700;
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es; Retroviridae; Lentivirus.
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Query Match
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                                                             SEQUENCE FROM N.A.

MEDLINE-88219542; PubMed=3369091;

MEDGO C., Guo H.-G., Franchini G., Aldovini A., Col

Gurgo C., Guo H.-G., Franchini G., Reitz M.S. J

Farrell K., Wong-Staal F., Gallo R.C., Reitz M.S. J

"Envelope sequences of two new United States HIV-1

"Invology 164:531-536(198).

-!- MISCELLANEOUS: THE SC ISOLATE WAS TAKEN FROM AN
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RESULT 10
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Query Match Best Local S Matches 33

. Similarity 91.7 33; Conservative

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Score 184; DB 1; Pred. No. 6.3e-15; 3; Mismatches 0

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Length 856;

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DISULFID
CARBOHYD
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Cell 45:637-648(1986).
-:- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND WMJ3 WERE OBTAINED FROM BLOOD SAWPLES SEQUENTIALLY TAKEN FROM A TWO-YEAR OLD HAITIAN WHC WAS PERINATALLY INFECTED BY HER MOTHER.
PIR: A24774; VCLJ3W.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000377; GP120.
Pfam; PF00516; GP120; 1.
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MEDLINE=86218077; PubMed=2423250;

MEDLINE=86218077; PubMed=2423250;

Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D.,

Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., We are a second of conserved a regions in the envelope gene of HTLV-III/LAV, the x
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: E
glycoprotein (GP120); Transmembrane glycoprotein
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1- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND WMJ3 WERE OBTA BLOOD SAWPLES SEQUENTIALLY TAKEN FROM A TWO-YEAR. OLD H WAS PERINATALLY INFECTED BY HER MOTHER.
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Envelope polyprotein GP160 precursor [Contains: I
glycoprotein (GP120); Transmembrane glycoprotein
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15-JUL-1999
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InterPro; IPR000777; GP120.
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BY SIMILARITY
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01-FEB-1991 (Rel. 17, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane
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Pfam; PF00517; GP41; 1
AIDS; Coat protein; Pc
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InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                         the viral genome.";
J. Virol. 64:4016-4020(1990).
                                                                                                                                                                                                                                                                                                                                                                                                         MEDIINE-90317906; PubMed-2370688; York-Higgins D., Cheng-Mayer C., Bauer D., "Human immunodeficiency virus type I cellureplication, and cytopathicity are linked the viral genome.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type 1 (SF33 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus.
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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                                                                                                            Cheng-Mayer C., Quiroga M., Tung J.W., Dina D., Levy J.; "Viral determinants of human immunodeficiency virus type 1 T-cell macrophage tropism, cytopathogenicity, and CD4 antigen modulation. J. Virol. 64:4390-4398(1990).
                                                                                                                                              SEQUENCE FROM N.A. MEDLINE=90347835;
                                                                                                                                                                     Human immunodeficiency virus type 1 Viruses; Retroid viruses; Retrovirion NCBI_TaxID=11691;
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01-FEB-1991 (Rel.
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InterPro; IPR000777; GP120.
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                                            Buropean Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way ified and this statement is not removed. Usage by and for commercial ities requires a license agreement (See http://www.isb-sib.ch/announce/send an email to license@isb-sib.ch).
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M38428; E
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MEDLINE-86218077; PubMed=2423250;

Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D., Modrow S., Starcich B.R., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal "Identification and characterization of conserved and variable "Identification" and varia
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                                                                                                                                                                                                                         Viruses; Retroid
NCBI_TaxID=11701;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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                       ., Modrow S., Wolf H.,
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InterPro; IPR000777; Gp120.
Pfam; PF00516; Gp120; 1.
Pfam; PF00517; GP41; 1.
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M17451; ENV$RF.
YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
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RESULT 15
ENV_HVLJ3
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ENV_HVIJ3

P12489;

01-OCT-1989 (Rel. 12, Created)

01-OCT-1989 (Rel. 12, Last sequence update)

15-UUL-1999 (Rel. 38, Last annotation update)

Envelope polyprotein GP160 precursor [Contains: Exterior membrane Envelope (GP120); Transmembrane glycoprotein (GP41)].
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HIV; M21138; ENV$JH3.
InterPro; IPR000328; Env GP41.
InterPro; IPR000777; GP120.
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MEDLINE-89352108; PubMed=2669897;
MKOniyama N., Hattori N., Inoue J., Sakuma
"Nucleotide sequences of gag and env genes
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Res. Hum. Retroviruses 5:411-419(1989).
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 SPTREMBL_21:*

1: sp_archea:*
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11: sp_rodent:*
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1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

16	15	14	13	12	11	10	9	80	7	6	ъ	4	ω	N	1	Result No.
189	189	189	193	193	193	193	193	193	193	193	193	193	193	193	193	Score
96.9	96.9								99.0							Query Match
854	854	838	856	856	856	854	854	852	851	752	752	752	748	747	645	Length
15	15	15	15	15	15	-15	15	15	15	15	15	15	15	15	15	DB
Q78705	090178	Q03806	Q74090	Q74599	092877	Q72502	Q85582	Q89797	Q78243	270608	Q70605	Q70604	Q70606	070607	Q993A6	ID
Q78705 human immun	O90178 human immun	Q03806 human immun	Q74090 human immun	Q74599 human immun	092877 simian-huma	Ξ.	Q85582 human immun	Q89797 human immun	Q78243 human immun	Q70608 human immun	Q70605 human immun	Q70604 human immun	Q70606 human immun	Q70607 human immun	Q993a6 human immun	Description

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Q8UL83	Q8UL84	Q8Q850	Q8UL73	Q8UL77	Q8UL79	087080	Q8UL85	080T88	Q8UL90	Q8UL70	041539	Q72993	080852	056110	Q8Q851	Q77368	041556	Q80023	069910	09QIW0	Q9YXR3	Q69990	Q9Q722	Q993в2	Q993B0	Q90SM7	Q03805	Q78225
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human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	nemuņ	human	human	human
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Qy Db	SQ SQ Qu	DR DR DR DR KW	RT RT	RR R R R R R R R R R R R R R R R R R R	RESULT Q993A6 ID QAC AC OT
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
EMBL; U12034; AAA76669.1; ".
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; Ge120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 747 747
SEQUENCE 747 AA; 84250 MW; 732E836A52245F14 CRC64;
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                                                                                                                                           MEDLINE-95127297; PubMed-7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger
Shaw G., Kong L., Weiss S., Waters D., Gallo R., B
"Viral variability and serum antibody response in
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Submitted (JUL-1994)
EMBL; U12032; AAA766
                                                 Mulder K.E.;
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Pred. No. 4.7e-15,
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Reitz M., Hall L., Robert-Guroff M., Lautenberger
Shaw G., Kong L., Weiss S., Waters D., Gallo R., E
"Viral variability and serum antibody response in
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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NCBI_TaxID=11676;
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blatt
"Viral variability and serum antibody response in a la
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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SEQUENCE
                                                                                                                                                         Submitted (JUL-1994) to the EMBL; U12035; AAA76670.1;
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InterPro; IPR000777; GP120.
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JENCE 752 AA;
   YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PF00516; GP120; PF00517; GP41; J
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ER 752 7
                                                                                                               PF00516; GP120; 1
PF00517; GP41; 1.
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                                                 Similarity
                                                                                                                                                                                                                                                             Kong L., Weiss S., Waters D., Gallo R., Blattner W
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                                                                                                                                                                                                                                                                                                                                                                                    (TrEMBLrel. 01, Created)
(TrEMBLrel. 01, Last sequence update)
(TrEMBLrel._19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                           Glycoprotein; Polyprotein; Transmembrane 752
                                                                                84780 MW;
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97.2%;
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Pred. No. 4.7e-15;
1; Mismatches 0
                                    Score 193; DB 15;
Pred. No. 4.7e-15;
1; Mismatches 0;
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Best Local
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Q89797:
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01-NOV-1996 (TrEMBLrel. 0
01-OCT-2001 (TrEMBLrel. 1
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Q78243;
Q1-NOV-1996
Q1-NOV-1996
Q1-DEC-2001
SEQUENCE FROM N.A.
STRAIN-LW90-2;
MEDLINE-95127297: PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M.,
Shaw G., Kong L., Weiss S., Waters D.
"Viral variability and serum antibod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carlini F., Federic M., Equestre M., Verani P., Rossi G.B.;
"Sequence analysis of HIV-1 proviral chronically infected HUT-78 cellular J. Viral Diseases 1:40-55(1992).
                                                                                                                                                                                                                                                                                                                           Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS: Coat protein; Glycoprotein;
SEQUENCE 851 AA; 96630 MW; 1A:
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                                                                             Human immunodeficiency virus type Viruses; Retroid viruses; Retrovir Viruses; Retrovir Viruses; Retrovir
                                                                                                                           Envelope
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EMBL; Z11530; CAA77628.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                      productive clone."
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Viruses; Retroid viruses; Retroviridae;
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antibody 1
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Titti F., Federico M., Butto S., Orecchia A., Borsetti A., Saggio I., Verani P., Rossi G.; "Variability of HIV-1 virus: characteristics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Biological and molecular characterization of producer and producer clones from HUT-78 infected with a patient HIV iscalls Res. Hum. Retroviruses 5:385-396(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-89352106; PubMed-2765297;
Federico M., Titti F., Butto S., Orecchia A.
Macchi B., Mangiano N., Verani P., Rossi G.;
                                                                                                                                                                                                                                                                                                                                   1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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1A3767B9B7E98027
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Lautenberger J., Hahn
., Gallo R., Blattner V
y response in a laborat
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   Laboratory
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01-NOV-1996
01-NOV-1996
01-DEC-2001
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SEQUENCE FROM N
STRAIN=LW90-2;
                                                                             InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF005516; GP120.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
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Submitted
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Envelope protein; Glycoprotein; Polyprotein;
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                                                                                                                                                                                          J. Virol. 66:3151-3154(1992).
EMBL; M19921; AAA44992.1; -.
                                                                                                                                                                                                                                  gp41 resultis in loss of killing
lymphocytes.";
                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Buckler C.E., Buckler-White Submitted (JUL-1989) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
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InterPro; IPR000777; GP120.
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AIDS Res. Hum.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=11676;
                                                                                                                                                                                                                                                    Dai L.C., Littaua R., Takahashi K., Ennis F.A.,
"Mutation of human immunodeficiency virus type
gp41 resultis in loss of killing by CD8+ A24-re
                                                                                                                                                                                                                                                                                                                         MEDLINE=92219406;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             molecular clone.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Adachi A., Gendelman H.E.,
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35; Conserv
  Similarity
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854 AA;
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                                                                                                                                                                                                                                                                                                                         PubMed=1373204;
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                                                                Glycoprotein; Polyprotein; Transmembrane 97124 MW; ABA0A1BF36D5595A CRC64;
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EMBL/GenBank/DDBJ databases.
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Last annotation updat
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3e-15;
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RESULT 11
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EMBL: U265-:

InterPro; IPR00777; \.

InterPro; IPR00777; \.

Pfam; PF00516; GP120; I.

R Pfam; PF00517; GP41; I.

KW AIDS; Coat protein; Glycoprotein; Po
CONFLICT 214 214 H-> L
CONFLICT 530 530 A -> (
7. TCT 530 739 G ->

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7. 4: 97005 MW; FF
                                                                                                                                                                                                                                             Query Match
Best Local :
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092877;
01-NOV-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q72502;
01-NOV-1996 (TrEMBLrel. 01,
01-NOV-1996 (TrEMBLrel. 01,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
CCBI_TaxID=11676;
                             Simian-Human immunodeficiency Viruses; Retroid viruses; Retroid viruses; Ret. NCBI_TaxID=57667;
                                                                                     01-NOV-1998 (TrEMBLrel. 01-NOV-1998 (TrEMBLrel. 01-DEC-2001 (TrEMBLrel.
SEQUENCE FROM N.A. MEDLINE=99098984;
                                                                 ENV.
                                                                                                                                                                                                                                                                                                                                                                                                     retrovirus in human and molecular clone.";
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                                                                          Envelope
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-NL4-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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                                                                          glycoprotein.
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 PubMed=9882298
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97.2%;
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                                           Retroviridae;
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l; Mismatches
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Pred. No. 5.
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H -> L (IN REF. 2).
A -> S (IN REF. 2).
G -> D (IN REF. 2).
FF2264B3841D1220 CRC64;
                                                      virus
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Q74599;
Q1-NOV-1996
Q1-NOV-1996
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InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Changes in human immunodeficiency virus type 1 envelope responsible for the pathogenicity of a multiply passaged immunodeficiency virus (SHIV-HXBC2).";
J. Virol. 73:976-984(1999).
                                                                                                                                                                                                  pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glyco
                                                                                                                                                                                                                                                               Submitted (JUN-1996) to the EMBL/GenBank/DDBJ EMBL; D86068; BAA12995.1; INTERPRO 1 PRRO 00728; ENV_GP41.

InterPro; IPRO 00777; GP120.
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                                                                                                                                                                               SEQUENCE
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Viruses; Retroid viruse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Spectrum of Biological Properties
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                       YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 673
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                                                                                    Similarity 97.2
35; Conservative
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35; Conservative
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                                                                                                                                                                             protein;
856 AA;
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                                                                                                                                                                             Glycoprotein; Polyprotein; T
97287 MW; 238042A234C56685
                                                                                                         99.0%;
97.2%;
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es; Retroviridae;
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                                                                                    Score 193; DB 15;
Pred. No. 5.3e-15;
l; Mismatches 0
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Pred. No. 5.3e-15;
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simian-human
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RESULT Q74090

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01-NOV-1996
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Pfam; PF00517; GP41; 1.

AIDS: Coat protein; Glycoprotein; Polyprotein; T
SEQUENCE 856 AA; 97396 MW; FE3E784C423C108C
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"Spectrum of Biological Properties
(HIV-1) Isolates.";
                                                                                                                          CHAIN
                                                                                                                                                                 CHAIN
                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                       EMBL; M68894; AAA44196.1;
                                                                                                                                                                                                                                                                                                                      Submitted (XXX-1992) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                     Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENV.
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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Viruses; Retroid viruses; Retroviridae;
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InterPro; IPR000777; GP120.
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EXTERIOR MEMBRANE GLYCOPROTEIN (GP120)
(BY SIMILARITY).
TRANSMEMBRANE GLYCOPROTEIN (GP41)
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Pred. No. 5.3e-15;
1; Mismatches 0;
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Matches 35
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MEDLINE-95074930; PubMed-7983770;
Fang H., Pincus S.H.;
"Unique insertion sequence and patt selected with immunotoxins from hun infected T cells.";
J. Virol. 69:75-81(1995).
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                   Fang H., Pincus S.H.;
Fang H., Pincus S.H.;
"Spontaneous activation of human immunodeficiency virus immunotoxin-resistant variant T cell line.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF070521; AAC28452.1;
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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PF00517; GP41; 1.
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854 AA; 96885 MW; 0808F3AED27C693B CRC64;
  Conservative
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Search completed: May 16, Job time: 27.3124 secs 2003, 11:19:48

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US-08-073-028-1
US-08-486-099-1
US-09-071-877-1
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US-08-485-264A-1
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603, App
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705, App
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Best Local Matches 3

l Similarity 97.2%; 35; Conservative

Pred. No. 7.1e-18; 1; Mismatches 0;

Indels

0;

Gaps

0;

Query	RESULT 1 US-08-073-028-1 US-08-073-028-1 Sequence 1, Applicant APPLICANT: COUNTRY: COUNTRY: COUNTRY: COUNTRY: COUNTRY: COMPUTER RE MEDIUM TY COMPUTER TELEPHONE TELEPHONE TELEPAX: TELEEX: FELEX: GEGENCE CH LERGTH: TYPE: MOLECULE TY US-08-073-028-1		. 322 332 332 332 332 332 332 332 332 332
Match	SULT 1 -08-073-028-1 -08-073-028-1 Sequence 1, Application US/08073028 Sequence 2, Applicant: Bolognesi, Dani P. Applicant: Synthetic Pennie & Edmonds STREET: 1155 Avenue of the Am CITY: New York COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-D SOFTWARE: Patentin Release #1 CURRENT APPLICATION NUMBER: US/08/073 FILING DATE: 07-UN-1993 CLASSIFICATION: 514 ATTORNEY/AGENT INFORMATION: NAME: COLUZI, Lauria A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 7872 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 869-8864/9741 TELEFAX: 66141 PENNIE INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 36 amino acids TYPE: amino acid STRANDEDNESS: single TOPOLOGY: unknown MOLECULE TYPE: Peptide		
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99.0	IN US/0807302 II. Dani P. II. T. II. T. II. T. III. T		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
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Score 193; DB 1; Length	EPTIDE INHIBITORS OF N ericas 00S 00, Version #1.25 ,028	ALIGNMENTS	US-08-474-349A-413 US-09-315-304B-15 US-09-315-304B-498 US-09-315-304B-603 US-09-315-304B-631 US-09-315-304B-631 US-09-315-304B-631 US-09-315-304B-1161 US-09-315-304B-1161 US-09-315-304B-1161 US-09-315-304B-1161 US-09-315-304B-1469 US-09-315-304B-1470
36;			Sequence 413, App Sequence 49, Appl Sequence 498, App Sequence 630, App Sequence 631, App Sequence 631, App Sequence 1176, App Sequence 1161, App Sequence 1161, App Sequence 1469, App Sequence 1469, App Sequence 11486, App Sequence 11486, App Sequence 1, Appli Sequence 771, App Sequence 775, App Sequence 7775, App Sequence 7775, App Sequence 7775, App Sequence 7775, App

US-08-486-099-

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                                                                                                                            Sequence 1, Application US/09071877 Patent No. 6015881
                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
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                                                                              APPLICANT: Kang, Myung-Chol
APPLICANT: Bray, Brian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/486
FILING DATE: 07-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: COURZE, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7872
TELECOMMUNICATION INFORMATION:
               APPLICANT: METUTAN, Gene
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEPTIDE SYNTHESIS
                              APPLICANT:
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MOLECULE TYPE:
08-486-099-1
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
FILE REFERENCE:
                                                             APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                                            Lichty, Maynard
Mader, Catherine
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Langlois, Alphonse J
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(212) 869-9741/8864
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Lambert, Dennis M.
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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97.2%;
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pred. No. 7.1e-18;
                                                                                                                                                                                                                                                                                                                       Length 36;
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Query Match
Best Local Similarity
Tatches 35; Conserve
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                                                                ; TOPOLOGY: ur ; MOLECULE TYPE: US-08-360-107A-1
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Query Match
Best Local Similarity
Matches 35; Conser
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                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US/08/360,107A FILING DATE: 20-DEC-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE: FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                           REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 787
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INHIBITION
TITLE OF INVENTION: OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                 TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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66141 PENNIE
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Lambert, Dennis M.
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97.2%;
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Pred. No. 7.1e-18;
L; Mismatches C
                  Score 193; DB 3; Pred. No. 7.1e-18;
     Mismatches
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                                                                                                        Sequence 1, Application Patent No. 6054265 GENERAL INFORMATION
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Best Local Similarity 97.2
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                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, LAURA A.
REGISTRATION UNMBER: 30,742
REFERENCE/DOCKET NUMBER: 7872-029
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9990
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: unknown
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,223B
FILING DATE: U7-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF
TITLE OF INVENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
   APPLICANT:
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CITY: New York
STATE: New Yor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                 1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                   1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                          INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10036-2711
                                                                                                                                           Application US/08919597
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
Barney, Shawn O.
Lambert, Dennis M.
Petteway, Stephen R.
                                                   Bolognesi, Dani P. Matthews, Thomas J. Wild, Carl T.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pennie & Edmonds LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Floppy disk
                                                                                                                                                                                                                                                                                                                   99.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                     Score 193;
Pred. No. 7.
                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                      DB 3;
                                                                                                                                                                                                                                                                                                                     1e-18
                                                                                                                                                                                                                                                                                                                                      Length 36;
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                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY: unknown ; MOLECULE TYPE: peptide US-08-919-597-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 97.2
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08475668A Patent No. 6060065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (212) 869-9741/81
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                  APPLICANT: Barney, S
APPLICANT: Lambert,
APPLICANT: Petteway,
TITLE OF INVENTION:
TITLE OF INVENTION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FLOPPY
COMPUTER: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 787
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/919,597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INHIBITION
TITLE OF INVENTION: OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
TRANSMISSION
                                                                                                                                                                                             NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: CORUZZI, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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                                                                             COUNTRY: USA
ZIP: 10036-2711
                                                                                                                      CITY: New York STATE: New Yor
                                                                                                                                  ADDRESSEE: Pennie & Dumburg
ADDRESSEET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                    New York
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                                                                                                                                                                                                                                                  Petteway, Stephen R.

VENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE

VENTION: FUSION-ASSOCIATED EVENTS, INCLUDING INF
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                                                                                                                                                                                                                                                                                                               Lambert, Dennis M.
                                                                                                                                                                                                                                                                                                                                     Barney, Shawn O
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.0%;
97.2%;
                                                                                                                                                                                                                   TRANSMISSION 211
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of the Americas
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                                                                                                                                                                                                                                                        INCLUDING INFLUENZA VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 36;
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US-08-485-551A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
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TELEX: 66141 PENNIE
NFORMATION FOR SEQ ID NO:
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COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER READABLE
CO
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REFERENCE/DOCKET NUMBER: 787:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                           NAME: COPUZZI, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                               CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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TOPOLOGY: unknown
MOLECULE TYPE: peptide
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Langlois, Alphonse J. TITLE OF INVENTION: METHODS FOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 07-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: New York
STATE: New Yor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
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                                                                      TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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10036-2711
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Coruzzi, Laura A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1155 Avenue of the Americas
                                                                  (212)
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                                                                                                                                                                                                                                                                                                                                                                                                                                           PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lambert, Dennis M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Barney, Shawn O.
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                                                                                                                                                                                                                                                                                                         07-JUN-1995
N: 435
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                                                                      869-9741/8864
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97.2%;
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211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Edmonds LLP
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    Mismatches

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Pred. No. 7.1e-18;
Pred. No. 7.1e-18;
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US-08-471-913A-3
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                                                                                                                                                                                    TELERA: (214)
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
"FNGTH: 36 amino acids
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Matches
                                                                              Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 10030-2/1-
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: peptide
                                                                                                                                        MOLECULE TYPE: peptide
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les 35; Conserv
                                                                                                                                                          TOPOLOGY: unknown
                                                                                                                                                                       STRANDEDNESS
                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
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                                1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                l Similarity
35; Conser
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                                                                Conservative
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                                                                             99.0%;
97.2%;
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                                                             Score 193; DB 3; Pred. No. 7.1e-18; 1; Mismatches 0
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                                                                                           Length 36;
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US-08-485-264A-1
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US-08-554-616-1
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                                                                                                                                                                                                                                                                                                                                                                                         ery Match
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/073,028
FILING DATE: 07-JUN-1993
ATTORNEY/AGENT INFORMATION:
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ADDRESSEE: Pennie & Edmonds
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                                 TITLE OF INVENTION:
                                                TITLE OF
                                                                 APPLICANT:
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                  ITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC
OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7872-004-999
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STATE: New York
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                                                                                                                                                                                                          Application US/08485264A
                                              INVENTION:
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                                                            Barney, Shawn O.
Lambert, Dennis M.
Petteway, Stephen R.
Langlois, Alphonse J.
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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, Alphonse J.
COMPOSITIONS FOR INHIBITION OF
MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
RESPIRATORY SYNCYTIAL VIRUS TRANSMISSION
232
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97.2%;
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Pred. No. 7.1e-18
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; OTHER INFORMATION: Core polypeptide US-09-082-279B-15
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                                                                                                                               SOFTWARE: F
SEQ ID NO 15
LENGTH: 36
TYPE: PRT
                               Query Match
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Best Local Similarity
     Matches
   Best Local Similarity
Matches 35; Conserv
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                                                                                                                                                                             NUMBER OF SEQ ID NOS: 1515
SOFTWARE: F-----
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                       FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
                                                                                                                                                                                                                                                       APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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                                                                                                              ORGANISM: Artificial Sequence
                                                                                                  FEATURE:
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CITY: New York
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OPERATING SYSTEM:
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FILING DATE: 07-JUN-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE:
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5. 6258782
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Guthrie, Kelly
Merutka, Gene
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(212) 869-9741/8864
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   Conservative
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97.2%;
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97.2%;
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          Score 193; DB 4,
No. 7.1e-18;
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Pred. No. 7.1e-18;
1; Mismatches 0;
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Mismatches
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RESULT 15
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                                                                                                                                                                                                               ; OTHER INFORMATION: Core polypeptide US-09-082-279B-498
                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/082,279B; CURRENT FILING DATE: 1998-05-20 NUMBER OF SEQ ID NOS: 1515; SOFTWARE: FastSEQ for Windows Version 3.0; SEQ ID NO 498; LENGTH: 36; TYPE: PRT: ORGANISM: Artificial Sequence; FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Core polypeptide US-09-082-279B-497
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
TQ ID NO 497
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                         Query Match
Best Local Similarity
Matches 35; Conser
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Best Local Similarity 97.2%;
Matches 35; Conservative
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TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                       1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                         YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Guthrie, Kelly
Merutka, Gene
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Merutka, Gene
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97.2%;
                                                                                                                                         Score 193; DB 4;
Pred. No. 7.1e-18;
1; Mismatches 0
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Pred. No. 7.1e-18;
1; Mismatches 0
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CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOPTWARAE: FastSEQ for Windows Version 3.0
SEQ ID NO 603
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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                                                                                                                       Query Match 99.0%;
Best Local Similarity 97.2%;
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 603, Application US/09082279B Patent No. 6258782
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE:
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                                                1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
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Merutka, Gene
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2003, 11:22:13
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Pred. No. 7.1e-18;
                                                                                                                         Mismatches
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Search completed: May 16, Job time: 11.1928 secs

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Scoring table:
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Perfect score:
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    Published_Applications_AA:*

1: /cgn2_6/ptodata/1/pubpaa/U

2: /cgn2_6/ptodata/1/pubpaa/U

3: /cgn2_6/ptodata/1/pubpaa/U

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17: /cgn2_6/ptodata/1/pubpaa/I

18: /cgn2_6/ptodata/1/pubpaa/I

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Gapop 10.0 , Gapext 0.5
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Maximum Match 100%,
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptcodata///pubbaa/PCT_NEW_PUB.pep: *
/cgn2_6/ptcdata/1/pubpaa/US06_NEW_PUB.pep: *
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	. 21	
180	180	181	181	181	181	182	182	183	184	184	184	187	189	190	190	193	193	193	193	193	193	193	193	193	
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-09-854-816	US-09-854-816-109	US-09-476-242-2	-891-609-	US-09-891-609-4	854-816-	US-09-854-816-34	854-816-	US-09-854-816-46	US-09-854-816-12	US-09-854-816-9	US-09-854-816-50	US-10-059-271-94	US-09-854-816-13	US-09-854-816-19	US-09-912-824-1	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	
38, 7		2	2,	4, A	26,	34,	28,	46,	12,	Sequence 9, Appli	e 50,	94,	13,	19,	e 1,	`	Sequence 53, Appl	103,	•	$\frac{3}{3}$	(D)	•	ω Θ	Sequence 49, Appl	Trades of Contraction

ALIGNMENTS

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RESULT 1

US-09-874-475-16

Sequence 16, Application US/09874475

Publication No. US20020182592A1

GENERAL INFORMATION:
APPLICANT: Petropoulos, Christos J.
APPLICANT: Petropoulos, Christos J.
APPLICANT: Phitcomb, Jeanette
APPLICANT: Huang, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE
TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS
FILE REFERENCE: 2793/65166
CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
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: TYPE: PRT

: ORGANISM: Fusion Inhibitor Peptide

US-09-874-475-16
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US-10-116-797-1
                                                                                                                                    Sequence 1, Application US/10116797 Publication No. US20030044411A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.1 SEQ ID NO 16 LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                Query Match 99.0%;
Best Local Similarity 97.2%;
Matches 35; Conservative
APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OLIVENTION: METHODS FOR INHIBITING HIV-1 INFECTION
FILE REFERENCE: 64672-A
CURRENT APPLICATION NUMBER: US/10/116,797
CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                   1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Pred. No. 1e-16;
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NUMBER OF SEQ ID NOS: 5 SOFTWARE: PatentIn version

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; FEATURE:
; ANAME/KEY: PEPTIDE;
; LOCATION: (1)..(36);
; OTHER INFORMATION: T-20
US-09-796-202-10
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; ORGANISM: Homo sapiens
US-10-116-797-1
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US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide
US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match Best Local Similarity 97.2
                                                                                                                                               NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin version 3.0
SEQ ID NO 10
LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                  APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT ETILING DATE: 2001-02-29
NUMBER OF CRO.
Query Match
Best Local Similarity
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Best Local Similarity
Matches 35; Conserv
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Patent No. US20020068813A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/493,346
CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn Ver: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Olson, William C APPLICANT: Maddon, Paul J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             equence 1, Application US/09493346 blication No. US20030082185A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                 ORGANISM: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ITTLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1
ITTLE OF INVENTION: Infection
ILE REFERENCE: 61009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NERAL INFORMATION
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Pred. No. 1e-16;
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Pred. No. 1e-16;
   Score 193;
Pred. No.
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US-09-834-628-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Human immunodeficiency virus type US-09-779-451-5
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US-09-779-451-5
                                                                      Matches
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LENGTH: 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/09834628
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                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PEPTIDES FOR INHIBITION
FILE REFERENCE: 05823.0198-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2000-11-06 NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/181,543 PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/235,901 PRIOR FILING DATE: 2000-09-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: YU,
                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                    LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
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nes 35; Conserv
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                YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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35; Conser
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                                                                                     99.0%;
97.2%;
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                                                                                   Score 193; DB 1
Pred. No. 1e-16;
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Pred. No. le-16;
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36
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US-09-854-816-1

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US-09-854-816-108
US-09-854-816-108
Sequence 108, Application US/09854816
Patent No. US20020151473A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID NO: 1: 9-854-816-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                    1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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APPLICATION DATA:

APPLICATION NUMBER: US/09/854,816

FILING DATE: 15-May-2001

CLASSIFICATION: CURKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: Linear MOLECULE TYPE: DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
NUMBER OF SEQUENCES:
                                                                                                                                                      APPLICANT: Andrew C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 94080
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                        INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Andrew C. Braisted
                                                                        J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Robert S. McDowell
J. Christopher Phelan
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                                                                                                               J. Kevin Judice
Robert S. McDowell
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                                      Constrained Helical Peptides and Methods of
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  Making Same
113
                                                        Wells
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Pred. No. 1e-16;
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                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 176
LENGTH: 37
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Best Local Similarity
Matches 35; Conserv
                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 176, Application US/09848616 Publication No. US20030054010A1
                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
                                                                                                                                                                                                                                                                                        APPLICANT: Lechner, Franziska
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Sebbel, Peter APPLICANT: Dunant, Nicolas
                                                                                                                   FEATURE:
                                                                                            OTHER INFORMATION: DP178c peptide
                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                         TYPE: PRT
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    Local Similarity
nes 35; Conserv
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APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: Linear SEQUENCE DESCRIPTION: SEQ ID NO: 108:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
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Tissot, Alain
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    Conservative
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                    99.0%;
97.2%;
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97.2%;
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                  Score 193; DB 9;
Pred. No. 1.1e-16;
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Pred. No. le-16;
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Mismatches
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                                      Length 37;
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Gaps
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1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 37

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US-10-040-349B-2
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                                                                                                                                                                                                                                                                                                  : LENGTH: 56
: TYPE: PRT
: ORGANISM: Human immunodeficiency virus type 1
US-09-779-451-4
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US-09-779-451-41
                                                                                          RESULT 12
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                 GENERAL
                               Sequence 2, Application US/10040349B Publication No. US20030082521A1
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Best Local Similarity
                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection o
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                            RIOR APPLICATION NUMBER: US 60/181,543 FIOR FILING DATE: 2000-02-10 NUMBER OF SEQ ID NOS: 77 SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/235,901 PRIOR FILING DATE: 2000-09-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OFTWARE: PatentIn version 3.0 pg ID NO 41
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                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                 1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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               INFORMATION:
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97.2%;
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Pred. No. 1.3e
1; Mismatches
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Pred. No. 1.6e-16;
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L.3e-16;
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US-10-059-271-84
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                                                                         Sequence 81, Application US/10059271 publication No. US20030082208A1 GENERAL INFORMATION:
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Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 84
LENGTH: 221
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 84, Application US/10059271 Publication No. US20030082208A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR ETLING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES
TITLE OF INVENTION: BEING IMMOBILIZED
                        APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn ver
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 01-078-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Polypeptide Inducing Antibodies Neutralizing HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Peptide
LOCATION: (1)..(177)
OTHER INFORMATION: polypeptide derived from gp41 LAI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT ORGANISM: Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
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                                                                                                                                                                                                              131 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 166
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         INVENTION:
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ECKHARD
US, STEFAN
: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE'SEQUENCES
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Pred. No. 5.5e-16;
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CURRENT APPLICATION NUMBER: US/10/059 271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 81
LENGTH: 232
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: THEORYTICAL Description of Artificial
                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 82
LENGTH: 254
TYPE: PRT
OTRANISM: Artificial Sequence
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Search completed: May 16, 2003, 12:10:25 Job time: 16.759 secs
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                                                                                                                                                                                                               OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide US-10-059-271-82
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US-10-059-271-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: peptide
US-10-059-271-81
                                                                                                                Query Match
Best Local Similarity 9,...
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 82, Application US/10059271 Publication No. US20030082208A1 GENERAL INFORMATION:
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Best Local Similarity
Matches 35; Conserv
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CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: ALBRE-22
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                                                                   Conservative
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97.2%;
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Pred. No. 7.3e-16;
Pred. No. 7.3e-16;
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Perfect score:
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Maximum DB seq length: 200000000
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1: /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:*

2: /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:*

3: /SIDS2/gcgdata/geneseg/genesegp-emb1/AA1981.DAT:*
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Gapop 10.0 , Gapext 0.5
    US-09-623-533A-537
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1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF
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AAW88113
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ABB02115
AAU13186
AAB77633
AAR67724
AAY22817
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HIV-1 BA-L clone-e
Human Immunodefici
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DP178-like/DP107-l
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22	22	21	21	21	21	21	21	21	21	21	21	.21	21	21	21	21	21	20	20	19	19	18	17	16	23	19	19	10	23	19	23	19	23	19
AAU70741	AAU70179	AAY89999	AAY89983	AAY89982	AAY89777	AAY89735	AAY89692	AAY89424	AAY89242	AAY89136	AAY89135	AAY88729	AAY88665	AAB14533	AAB52818	AAB52688	AAB52655	AAY31974	AAY31955	AAY22805	AAY22912	AAW17011	AAR98398	AAR64364	ABG68321	AAY22850	AAW43069	AAP94507	ABG68287	AAY22816	ABG68284	AAY22813	ABG68325	AAY22854
н	Ξ	c		C	C	O	G	c	0	c	O	Q	C	H	T	T	T	н	S	S	S	H		D	E	S	H	S	H	S	E	S	Ħ	S
2 trans	viral envelop	e polypeptide	OD.	polypeptide	polypeptide	polypeptide	polypeptide	olate LA	3 peptid	w	178 pepti	36	ĕ	1 fr	EQ ID NO. 108 fro	HIV-1 derived pept		DP-178 derived fro	lope prote	ID NO. 46 fro	Œ		elope prote		elope prote	ID NO. 9 from	elope prot	EQ ID NO. 50 from						

ALIGNMENTS

WPI; 2001-514829/56

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RESULT 2
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The invention relates to isolated analogues of the heptad repeat regisepettides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-LIAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other
                                                                                      Disclosure; Page 337; 587pp; English
                                                                                                                                                                                                                                                                                                                                                               WO200164013-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus; HIV; respiratory syncytial virus; virucide; heptad repeat region; transmembrane protein; qp41: HR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viral core
                                                                                                                                   Heptad repeat region peptide analogs useful for inhibiting virus/cells fusion, useful for treating HIV and Respiratory Syncytial Virus
                                                                                                                                                                                 WPI; 2001-514829/56
                                                                                                                                                                                                             Antczak
                                                                                                                                                                                                                                                                                                     07-FEB-2001; 2001WO-US03988.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Heptad repeat region peptide analogs useful for inhibiting virus/cells fusion, useful for treating HIV and Respiratory Syncytial Virus
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                                                                                                                                                                                                             Erickson
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Pred. No. 2.9e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                   transmembrane protein; gp41; HR1; HR2;
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                                                                                                                                                                                                           Lambert
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RESULT 3
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Best Local S
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           activity. The peptides of the invention (ANU12559-ANU14009) comprise DP178-like and DP107-like peptides. The DP178 peptide corresponds to amino acids 639-673 of the transmembrane protein gp41 from human immunodeficiency virus 1 (HIV-1) isolate LAI. The DP107 peptide corresponds to amino acids 558-595 of gp41 from HIV-1LAI. The inversion relates to a method of identifying compounds that inhibit the formation of or disrupts a DP107/DP178 complex. The method comprise detecting the formation of a DP107/DP178 complex, both in the presence of a test compound, in a reaction mixture containing DP10 or absence of a test compound, in a reaction mixture containing DP107/DP178 peptides. The method is useful for identifying compounds, and DP178 peptides. The method is useful for identifying compounds,
                                                                                                                                                                                                                                                   Identifying a compound that inhibits the formation of or disrupts a DP107/DP178 complex, especially compounds with antifusogenic, antiviral or intracellular modulatory activity, by detecting the formation of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided the specification.
                                                                                                                                                       The present invention relates to peptides which exhibit anti-retroviral activity. The peptides of the invention (AAU12559-AAU14009) comprise
                                                                                                                                                                                                   Disclosure; Page 65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and/or with peptides derived from them. normal infectivity of viruses such as R
                                                                                                                                                                                                                                      DP107/DP178
                                                                                                                                                                                                                                                                                                                   WPI; 2001-442157/47.
                                                                                                                                                                                                                                                                                                                                                                               (TRIM-) TRIMERIS INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus 1 isolate LAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antifusogenic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antiviral; HIV transmission;
   molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note=
36
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                                                                                                                                                                                                                                                                                                                                                  Erickson JB,
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Pred. No. 2.9e-17;
; Mismatches 0;
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                                                          comprises
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RESULT 4
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modulation of neurotransmitter exchange and sperm-egg fusion), intracellular processes involving coiled-coil peptides (e.g. bacterial infections) and viral infections that involve cell-cell and/or virus-cell fusion (e.g. viral infections caused by human immunodeficiency virus, respiratory syncytial virus, Epstein-Barr virus, hepatitis B virus, Mason-Pfizer virus and polio virus). The enhancer peptides sequence increases the half-life and reduces the clearance rate of therapeutic peptides, which increases their efficacy and minimises the incidence and severity of adverse side effects. In addition, this increases the sensitivity of the diagnostic procedure
                                                                                                                                                                                                                                          The present sequence is a core polypeptide which may be linked to an enhancer peptide to form a novel hybrid polypeptide. The hybrid polypeptide exhibits enhanced pharmacokinetic properties relative to those exhibited by the core polypeptide when introduced into a living system. It is used to increase the in vitro or ex vivo half-life of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antifusogenic, antiviral or intracellular modulatory activity. The DP178-like/DP107-like peptides are useful to inhibit human and non-huretroviral, particularly HIV, transmission to uninfected cells. The present sequence represents one of the DP178-like/DP107-like peptides of the invention.
                                                                                                                                                                        the core polypeptide. The hybrid and core polypeptides can be used for modulating fusogenic events and intracellular processes involving coiled-coil peptide interactions. Other uses include preventing, treating and/or diagnosing disorders involving fusion events (e.g.
                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 44; 151pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                    New hybrid polypeptide, e.g. viral infections, o
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-147136/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Barney
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Core polypeptide; virucide; hepatot:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TRIM-) TRIMERIS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                      diagnosing
to a core
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RESULT 5
AAR67724
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XX
                                              Query Match
Best Local Similarity
Matches 36; Conserv
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Best Local
                                                                                                                              This protein is the gp120 (envelope glycoprotein) from the GNE8 isolate of HIV-1 (human immunodeficiency virus type 1). There are neutralising epitopes in the V2 and C4 domains of gp120, in addition to the neutralising epitopes in the V3 domain. Although the amino acid sequences of the neutralising epitopes in the V2, V4 and C4 domains are variable, the amount of variation is highly constrained. This facilitates the design of HIV subunit vaccines that can induce antibodies that neutralise the most common HIV strains for a given geographic region. This invention provides a multivalent gp120 subunit vaccine where the gp120 present in the vaccine is from at least two HIV isolates which have different amino
                                                                                               Sequence
                                                                                                                         acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HIV; human
GNE clone;
                                                                                                                                                                                                                                                                    Claim 23; Page 27-30; 108pp; English.
                                                                                                                                                                                                                                                                                             analysis, prevention
                                                                                                                                                                                                                                                                                                          Use of HIV gp 120 polypeptide(s) -
                                                                                                                                                                                                                                                                                                                                  WPI; 1995-036112/05
N-PSDB; AAQ76018.
                                                                                                                                                                                                                                                                                                                                                                        веrman
                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gp120 from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-SEP-1995
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 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                       YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF
YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 667
                                                                                                                       sequences
                                                                                                                                                                                                                                                                                                                                                                       PW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the HIV GNE8 isolate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunodeficiency virus; gp120; glycoprotein;
GNE8 isolate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36
                                                                                                850 AA;
                                              . 100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                       Nakamura
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                       9308-0072833
                                                                                                                                                                                                                                                                                                                                                                                                                                               94WO-US06036
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                                                                                                                      neutralising
                                                                                                                                                                                                                                                                                             and therapy of
                                                                                                                                                                                                                                                                                                                                                                       GR;
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                                                         Score 194; DB 16;
Pred. No. 9.5e-16;
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                                              Mismatches
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                                                                                                                       epitope
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                                                                                                                                                                                                                                                                                               VIΗ
                                                                                                                                                                                                                                                                                               developing
V infection
                       36
                                                                      DB 16;
                                                                                                                       ij
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                                                                                                                                                                                                                                                                                                        probes
                                                                    Length
                                               Indels
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                                                                                                                       regions
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                                               Gaps
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                                               0,
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RESULT 6 AAY22817

AAY22817 standard;

Protein; 268

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                                                                                                                                                                    CC Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus CC (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins CC of known HIV virus strains (AAY22810, AAY22871, AAY22880 AAY22888 and CC AAY22903 represent consensus sequences of various sections of the gp41 CC protein). Sequences derived from the peptides are used to produce CC constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptide by synthesising an octapeptide in which both terminal CC mino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain CC residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that CC prevent viral membrane fusion or infectivity. Vaccines may contain CC uses for the constrained helical peptides are used to treat or prevent strains of CC HIV. The antibodies are also useful from several different strains of CC purification; as epitope miss for protein A in immunoglobulin CC purification; as epitope miss for mentions of infunction; for isolation of synthetic antibody clones from phage display libraries, or as stable CC forms of "floppy" peptides or proteins.
                                                                   Query Match
Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus 9p41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Braisted A, Wells JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIV; gp41 protein; constrained helical peptide; HIV vaccine; antibody; viral membrane fusion; viral infe ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY22817;
                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 11; Page 152-153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GETH ) GENENTECH INC.
168
                                                                      Local Similarity
les 35; Conser
                      1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
YTSIIYSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 from WO9820036
                                                                                                                                          268
                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Judice JK,
                                                                                                                                          AA;
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96US-0743698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97WO-US20069
                                                                                  99.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    McDowell RS,
                                                                   Score 192; DB 19;
Pred. No. 4.7e-16;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Phelan JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               infectivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV infection;
                                                                                                      Length 268;
                                                                      Indels
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RESULT 7 ABG68288

AAR14905;

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AAR14905
ID AAR1
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                                                                                                                                                                                                                                                                             The invention relates to cyclic peptides (A) with a constrained helical CC conformation, derived from gp41 (glycoprotein 41, a viral envelope CC protein) protein of human immunodeficiency virus (HIV). The cyclic CC peptides have formulas given in the specification part of which are derived from a consensus sequence of gp41 derived from HIV clades A, B, CC, D, E or O. The peptides are used to cause induction of a specific cimuune response, resulting in antibodies that prevent virus-induced cc immune response, resulting in antibodies that prevent virus-induced cc fill infection, either as antifusion/anti-infection agents or, CC preferably where associated with a carrier, as an immunogen (including as vaccine) to raise antibodies. The antibodies may be used for diagnosis or prevention/treatment of HIV infection (i.e. acquired immunogen clincing cases of health care accidents. The peptides can be based on specific HIV strains, e.g. breakthrough isolates of them should cover a wide range of protection. The present sequence is gp41 protein from a particular cc HIV clade used to derive a consensus sequence of gp41.
                                                                                                                                                                                         Query Match Sest Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-JUN-1997;
06-NOV-1996;
16-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1 clade B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV; glycoprotein; gp41; antigen; helical conformation; virus-induced membrane fusion; acquired immunodeficienc
  AAR14905 standard;
                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Column 147-150; 175pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   alpha-helical conformation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New cyclic peptides from human immune deficiency virus gp41, useful for treatment or prevention of HIV infection, are constrained to have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-487624/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wells
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         viral envelope protein; vaccine; virucide; anti-HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Envelope protein gp41 from HIV clade B strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-OCT-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC
                                                                                                     168 YTSIIYSLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                                 1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                           1 Similarity
35; Conserv
                                                                                                                                                                                                                                                                           268 AA;
                                                                                                                                                                                           Conservative
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96US-0743698.
97US-0876698.
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  Protein;
                                                                                                                                                                                                             99.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           268
  855 AA
                                                                                                                                                                                         Score 192; DB 23;
Pred. No. 4.7e-16;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Phelan JC,
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                                                                                                                                                                                                                                   Length 268;
                                                                                                                                                                                             Indels
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                                                                                                                                                                                             Gaps
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AAW11581
ID AAW
XX
AC AAW:
AC AAW:
DT 25-1
XX
DE Hum
XX
KW Acqu
KW env
XX
XX
OS Hum
XX
XX
OS Hum
XX
XX
ACqu
OS 19-
PD 19-
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                                                                                                                                                                                                                                                                                                                                             atches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human
viral
                 19-NOV-1996
                                                                    Human immunodeficiency
                                                                                                                                     Human Immunodeficiency Virus-1 strain
                                                                                                                                                                 25-MAR-1997
                                                                                                                                                                                                                  AAW11581 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                         granted patent numbers.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                usetul in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US HIV-1 isolates MN-ST1 and BA-L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Reitz M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (USSH ) NAT INST OF HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-OCT-1990;
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05-FEB-1992
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                                                                                                                                                                                                                                                                                         636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Note: Revised entry submitted to correct the patent number format
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                                                                                                                                                                                                                                                                                                                                                        Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Government-owned NTIS
                                                                                                                                                                                                                                                                                                                                                                                                                          Government-owned NTIS applications to prevent clashes with one
nted patent numbers. For further information please visit the
site at www.derwent.com/dwpi/updates/ntis_us.html.)
                                                                                               gene;
                                                                                                                                                                                                                                                                                       YTSIIYSLIEESQNQQEKNEQELLELDKWASLWNWF 671
                                                                                                                                                                                                                                                                                                               YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                            l Similarity
35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ14753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               therapeutics, vaccines and diagnostic tests
                                                                                               vaccine.
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                                                                                                                                                                                                                                                                                                                                            Conservative
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(first entry)
                                                                                                                                                                (first entry)
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                                                                                                          deficiency
                                                                                                                                                                                                                                                                                                                                                          99.0%;
                                                                    virus
                                                                                                                                                                                                                                                                                                                                                          . 2%;
                                                                                                          syndrome;
                                                                                                                                                                                                                      855
                                                                                                                                                                                                                                                                                                                                          Score 192; DB 12;
Pred. No. 1.7e-15;
1; Mismatches 0;
                                                                    type
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                                                                    (strain
                                                                                                          AIDS;
                                                                                                                                     BA-L
                                                                                                           envelope protein;
                                                                                                                                   envelope protein.
                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ongoing
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        going US
Derwent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0f
                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
AAW88113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    XX
FT
ET
                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DR
DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PR PR PR PR PA XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 35
17-OCT-1990;
25-FEB-1993;
15-FEB-1995;
14-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-OCT-1990;
25-FEB-1993;
15-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           these fragments comprise the env gene, as well as the coding regions for rev and the rev-responsive element of env, both necessary for efficient expression in eukaryotic cells. The claimed recombinantly produced envelope protein can be used as an immunogen for raising antibodies against HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A HindIII fragment of unintegrated viral DNA representing the BA-L genome was cloned into lambda phage Charon 28 DNA from total DNA of peripheral blood lymphocytes infected with and producing HIV-1 (BA-L) A positive clone was selected by hybridisation using a HIV-1 env probe. This clone, designated BA-L1, was found to contain the entire gene for the envelope protein on a 2.8 kb HindIII-XbaI fragment and a 0.4 kb EcoRI-HindIII fragment. When cloned together
                                                                                                                                                                                                                                                                                                    09-APR-1999
                                                                                                                                                                                                                                                                                                                             AAW88113;
                                                                                                                                                                                                                                                                                                                                                        AAW88113 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Fig 9; 86pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated envelope equivalents - useful a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-011206/01.
N-PSDB; AAT58551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Franchini G, Popovic M,
                                                                  14-MAY-1996;
                                                                                                                       US5869313-A
                                                                                                                                                              Misc-difference
                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                       Env protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (USSH ) US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                        636 YTSIIYSLIEESQNQQEKNEQELLELDKWASLWNWF 671
                                                                                                                                                                                                                                              HIV-1; HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                   immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             valued envelope protein of HIV-1 strain BA-L and recombinant ents - useful as immunogens for vaccines and antibody prodn. of US clinical isolates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   855 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Reitz MS;
                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                              strain BA-L; env protein; vaccine; HIV infection; immunogen: HIV-1 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallo RC,
90US-0599491.
93US-0022835.
95US-0388809.
96US-0647714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90US-0599491.
93US-0022835.
95US-0388809.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90US-0599491
                                                                  96US-0647714
                                                                                                                                                /note= "Gln encoded
                                                                                                                                                                                                                                                                                                                                                        Protein;
                                                                                                                                                                                                                                                                       BA-L strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gartner S,
                                                                                                                                                                                                                                                                                                                                                        855
                                                                                                                                                                                                   type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 192; DB 18;
Pred. No. 1.7e-15;
1; Mismatches 0;
                                                                                                                                                                                                                                                                       of Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                       ΑA
                                                                                                                                                bу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lori FC,
                                                                                                                                                CG"
                                                                                                                                                                                                                              HIV-1 diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Markham PD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 855;
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0;

Gaps

0

(USSH) US DEPT HEALTH

& HUMAN SERVICES

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RESULT 11
AAY22854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                K K K X D X D
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents the envelope protein of the BA-L (ATCC 40890) strain of Human immunodeficiency virus type 1 (HIV-1) strain MN-ST1. BA-L is more typical of United States isolates of HIV-1 than previously known strains. Recombinant, complete env protein of the BA-L strain is used as a vaccine component and for immunotherapy of existing HIV infections, to detect HIV-specific antibodies, e.g. in donated blood, and as an immunogen to raise specific antibodies, for
          Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                                                                                                                                                                                                                                          HIV; gp41 protein; constrained helical peptide; HIV vaccine; antibody; viral membrane fusion; viral infectioand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA encoding env protein of the human immune deficiency virus isolate BA-L - useful for producing protein for use in vaccines, assay reagent and to generate antibodies
                                                                                                          Wells
                                                                                                                       Braisted A,
                                                                                                                                                                              16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                     05-NOV-1997;
                                                                                                                                                                                                                                                14-MAY-1998
                                                                                                                                                                                                                                                                            W09820036-A1
                                                                                                                                                                                                                                                                                                      Human immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY22854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY22854 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV-1 diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Fig 9A-C; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Franchini G,
                                                                                                                                                   (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                19-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Popovic M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   636 YTSIIYSLIEESQNQQEKNEQELLELDKWASLWNWF 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1999-152779/13
DB; AAX04767.
                                                                               1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                     ŏ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                     50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 855 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Reitz MS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                       Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gallo RC,
                                                                                                                                                                            97US-0876698
96US-0743698
                                                                                                                                                                                                                     97WO-US20069
                                                                                                                                                                                                                                                                                                                                                                                                     WO9820036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .99.0%;
97.2%;
                                                                                                                                                                                                                                                                                                    virus
                                                                                                                         McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gartner S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 192; DB 20;
Pred. No. 1.7e-15;
Wismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lori FC,
                                                                                                                         Phelan
                                                                                                                       JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Markham PD;
                                                                                                                                                                                                                                                                                                                                                         HIV infection;
infectivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 855;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                         Starovasnik MA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              as
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PS XX PT PX PX PS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus CC (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins CC of known HIV virus strains (AAY22810, AAY22817, AAY22888 and CC AAY22903 represent consensus sequences of various sections of the gp41 CC protein). Sequences derived from the peptides are used to produce CC constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical cc amino acids have a side-chain that includes a group able to form an amide cond, and cyclising the octapeptide by reacting the specified side-chain cc The constrained helical peptides are used to treat or prevent HIV CC infection, especially as vaccines that generate antibodies that cc constrained helical peptides derived from several different strains of CC HIV. The antibodies are also useful for diagnosing HIV infection. Other cuses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily CC available, e.g. replacements for protein A in immunoglobulin cc of synthetic antibody clones from phage display libraries, or as stable cc forms of "floppy" peptides or proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                            16-JUN-1997;
06-NOV-1996;
16-JUN-1997;
                           New cyclic peptides from human treatment or prevention of HIV alpha-helical conformation -
                                                                                                                                                                                                                                                                             05-NOV-1997;
                                                                                                                                                                                                                                                                                                              07-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                            viral envelope protein; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                           HIV; glycoprotein; gp41; antigen; helical conformation;
virus-induced membrane fusion; acquired immunodeficienc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Envelope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 11; Page 192-193; 279pp; English
                                                                                             WPI; 2002-487624/52
                                                                                                                                                                                                                                                                                                                                           US6271198-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABG68325 standard; Protein;
                                                                                                                                                                              (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168 YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                           immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l Similarity
35; Conser
                                                                                                                                             AC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein gp41 from HIV clade B strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                            97US-049787P.
96US-0743698.
97US-0876698.
                                                                                                                                                                                                                                                                             97US-0965056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98.5%;
97.2%;
                                                                                                                                                 ĮK,
                                                                                                                                                 McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                          type 1 clade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 191; DB 19; Pred. No. 5.4e-16;
                                              immune deficiency virus gp41, infection, are constrained to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                             virucide; anti-HIV
                                                                                                                                                                                                                                                                                                                                                                                                                             immunodeficiency
                                                                                                                                                 Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                               JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 233;
                                                                                                                                                 Starovasnik MA;
                                                                                                                                                                                                                                                                                                                                                                                                                             syndrome;
                                               useful for have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                AIDS;
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0

Disclosure; Column 207-208;

175pp; English

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RESULT 13
AAY22813
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC The invention relates to cyclic peptides (A) with a constrained helical CC conformation, derived from gp41 (glycoprotein 41, a viral envelope CC protein) protein of human immunodeficiency virus (HIV). The cyclic CC peptides have formulas given in the specification part of which are CC derived from a consensus sequence of gp41 derived from HIV clades A, B, CC (D, E or O. The peptides are used to cause induction of a specific CC immune response, resulting in antibodies that prevent virus induced CC membrane fusion. The peptides are used to treat subjects with, or at risk CC of, HIV infection, either as antifusion/anti-infection agents or, CC preferably where associated with a carrier, as an immunogen (including as CC vaccine) to raise antibodies. The antibodies may be used for diagnosis or CC prevention/treatment of HIV infection (i.e. acquired immunodeficiency CC syndrome, AIDS), e.g. prevention of mother-to-child transmission or in CC cases of health care accidents. The peptides can be based on specific HIV Strains, e.g. breakthrough isolates of HIV that have developed during CC vaccine trials, so a combination of them should cover a wide range of CC protection. The present sequence is gp41 protein from a particular CC HIV clade used to derive a consensus sequence of gp41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus 9p41 protein, useful in vaccines for treatment and prevention
                                                                                                                                                                                                                         Braisted A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV; gp41 protein; constrained helical peptide; HIV infectio vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                               Claim 11; Page 148-149; 279pp; English.
                                                                                  of infection
                                                                                                                                                                        WPI; 1998-286866/25
                                                                                                                                                                                                          Wells JA;
                                                                                                                                                                                                                                                            (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                              16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                   05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                    14-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                       W09820036-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO. 9 from WO9820036.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY22813;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY22813 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                           Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ÃĄ.
                                                                                                                                                                                                                                                                                            97US-0876698.
96US-0743698.
                                                                                                                                                                                                                                                                                                                                                   97WO-US20069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.5%;
97.2%;
                                                                                                                                                                                                                           McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 191; DB 23;
Pred. No. 5.4e-16;
1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA.
                                                                                                                                                                                                                         Phelan JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HIV infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 233;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                         Starovasnik MA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or at risk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AIH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          as
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Peptides AAY22805-Y22917 (HIV). Specifically, AAY

2917 are derived AAY22810-Y22910

from Human immunodeficiency are derived from gp41 protei

gp41

proteins

virus

The invention relates to cyclic peptides (A) with a constrained helical conformation, derived from gp41 (glycoprotein 41, a viral envelope protein) protein of human immunodeficiency virus (HTV). The cyclic

New cyclic peptides from human treatment or prevention of HIV alpha-helical conformation -

immune deficiency virus infection, are constrain

constrained to

useful have

for

Disclosure; Column 141-142; 175pp; English.

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Best Local S
Matches 35
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06-NOV-1996;
16-JUN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY22903 represent consensus sequences of various sections of the 9p41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV; glycoprotein; gp41; antigen; helical conformation; virus-induced membrane fusion; acquired immunodeficiency viral envelope protein; vaccine; virucide; anti-HIV.
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                                                                                                                                                                                                                                                                                                                                          05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                         US6271198-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1 clade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Envelope protein gp41 from HIV clade B strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABG68284 standard; Protein; 268 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                           WPI; 2002-487624/52
                                                                                                                                                                                           Wells
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                                                                                                                                                                                                                                       (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      168 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF
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35; Conser
                                                                                                                                                                                                          AC,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      268 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                          Judice
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96US-0743698.
97US-0876698.
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97.2%;
                                                                                                                                                                                                          JK,
                                                                                                                                                                                                          McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 191; DB 19;
Pred. No. 6.3e-16;
1; Mismatches 0
                                                                                                                                                                                                       Phelan
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                                                                                                                                                                                                          Starovasnik MA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       syndrome; AIDS;
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RESULT 15
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                                                                                                                                                                                                                                                                                      Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                            Claim 11; Page 151-152; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-286866/25
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06-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     168 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 203
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96US-0743698.
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(HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY228871, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical

Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus

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constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily
                                                                                                                                                                                                                                                                                                                                                     peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV approaches the constrained helical peptides are used to treat or prevent HIV
Sequence
                                                                                        available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for of synthetic antibody clones from phage display libraries, or
                                                                                                                                                                                                                                                                                                      infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain
                                                            forms of "floppy" peptides or proteins.
   269 AA;
                                                                                                                        for isolation
                                                                                              or as stable
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 \vdash YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF Conservative 36

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Gaps

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밁 δõ 169 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 204

0;

Matches

Query Match Best Local Similarity

98.5**%**; 97.2**%**;

Score 191; DB 19; Pred. No. 6.3e-16; Mismatches

Length 269; Indels

Search completed: May 16, 2003, 11:12:05 Job time: 32.4578 secs

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2003, 11:04:54; Search time 12.1446 Seconds (without alignments) 284.970 Million cell updates/sec

Title: Perfect score:

US-09-623-533A-537 194 1 YTSLIYSLIEESQNQOEKNEQELLELDKWASLWNWF 36

Scoring table: BLOSUM62

Searched:

Gapop 10.0 , Gapext 0.5

.1 number of hits satisfying chosen parameters:

283224

283224 seqs, 96134422 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	ω	2	1	No.	Result	
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env polyprotein pr	protein -	3		env polyprotein pr		env polyprotein pr			env polyprotein pr	_	protein p	glycopro		envelope protein g	envelope protein g	env polyprotein M	env protein - huma	envelope glycoprot	envelope protein g	envelope protein g	envelope protein g		-	•	polyprotein	polyprotein	polyprotein	prote	Description		

RESULT 2 VCLJ3W

env polyprotein precursor - human immunodeficiency virus type 1 (isolate WMJ1) N;Contains: coat protein gp120; coat protein gp41 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1988 #text_change 07-Now-1997 C;Accession: A24774 R;Starcich, B.R.; Hahn, B.H.; Shaw, G.M.; McNeely, P.D.; Modrow, S.; Wolf, H.; Parks, Cell 45, 637-648, 1986 Cell 45, 637-648, 1986 A;Reference number: A24774; MUID:86218077; PMID:2423250 A;Accession: A24774; MUID:86218077; PMID:2423250

A;Molecule type: DNA A;Residues: 1-856 <STA> A;Cross-references: GB:K03455; GB:M38432; NID:g1906382

C; Genetics:

ALIGNMENTS

						ω	F 413	YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 	STTETI ETTETI	PEKNEO PEKNEO	SONOS	NLIEE SLIEE	TSLIY	1 Y 1 378 Y		Db Oy
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site:	Binding'	3P1> (GP2> 5,377/	red <6 rted <	edict redic 51,35	s prous prou	statu stat <tm< td=""><td>t) #s t) #s cted 88,2</td><td>F;1-251/Product: coat protein gpl20 (fragment) #status predicted <gp1>F;252-443/Product: coat protein gp41 (fragment) #status predicted <gp2>F;424-443/Domain: transmembrane #status predicted <tmn>F;424-443/Domain: transmembrane #status predicted <tmn></tmn></tmn></gp2></gp1></td><td>p120 gp41 #stai ,143,</td><td>cein g cotein nbrane 31,137</td><td>prot at pr nsmen 07,13</td><td>coat t: co : tra: 101,1</td><td>roduct: comain 8,78,</td><td>1/Pro 443/P 443/D 443/D ,36,4</td><td>1-25 252- 424- 9,23</td><td>म्बद्धा</td></tm<>	t) #s t) #s cted 88,2	F;1-251/Product: coat protein gpl20 (fragment) #status predicted <gp1>F;252-443/Product: coat protein gp41 (fragment) #status predicted <gp2>F;424-443/Domain: transmembrane #status predicted <tmn>F;424-443/Domain: transmembrane #status predicted <tmn></tmn></tmn></gp2></gp1>	p120 gp41 #stai ,143,	cein g cotein nbrane 31,137	prot at pr nsmen 07,13	coat t: co : tra: 101,1	roduct: comain 8,78,	1/Pro 443/P 443/D 443/D ,36,4	1-25 252- 424- 9,23	म्बद्धा
polyp	.ciency;	odefi	immun.	ein;	prote	1yco	ein n; g	c;semeries: A;Gene: env C;Superfamily: type E retrovirus env polyprotein C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp	s env	oviru	retr sid p	ype E ; cap	ly: t	env rfami	A;Gene: env C;Superfami C;Keywords:	0020
	ŭ.	55015)ID:g5	.1; P partn	3792 ual 1	AAB0	IDN:	A;Motecule type: DNA A;Rosidues: 1-443 <bur> A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; PID:g555015 A;Note: this virus was isolated from the mother's sexual partner</bur>	NID:g	7230; blated	R> B:M77 s isc	JNA 3 <bu es: G</bu 	A;MOLECUIE TYPE: DNA A;Residues: 1-443 <bur> A;Cross-references: GB: A;Note: this virus was</bur>	dues: s-ref : thi	Resi	
iversi	quence d	le sec	leotid	nucl	pe 1 38	18 ty .7630	viru ID:1	A;Title: Evolution of human immunodeficiency virus type 1 nucleotide sequence diversi A;Reference number: A41621; MUID:92107924; PMID:1763038 A;Accession: C41621	unode):921(n imm	huma 41621	on of er: A 621	A; Title: Evolution A; Reference number: A; Accession: C41621	e: Ev rence ssion	Titl Refe Acce	* P P P
	R.A.	bbs,	l.; Gi	, P.X	uyen	; Ng	, ј. 19	K.; Gulla 236-11240	rty, 3, 11:	Flahe	B.;	iser, Sci	C; Accession: C41621 R; Burger, H.; Weise Proc. Natl. Acad. S	er, H Natl.	Burg	פ פי
	666	·Aug-1	1e 26-	chang	ext_	31V-1)3 #t	1, H	C;Species: numan immunogericatency virus type 1, HIV-I A;Note: host Homo sapiens (man) C;Datte: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999	evision	C;Species: numan immunogericien A;Note: host Homo sapiens (man) C;Date: 11-Feb-1993 #sequence_r	iens seque	1mmu 993 #	ruman t Homo Feb-1	hos:	Note	0.20
	gp120	otein	at pr	of co	end o	хү1	arbo	N;Alternate names: coat polyprotein N;Alternate names: coat protein gp120 N;Contains: amino end of coat protein gp41; carboxyl end of coat protein gp120	tein rotei	N;Alternate names: coat polyprotein N;Contains: amino end of coat prote	of c	s: co	names	rnate ains:	Cont	zz
			ment)	fragm	1	type	rus	RESULT 1 C41621 env polyprotein P - human immunodeficiency virus type 1 (fragment)	odefi	immun	uman	بر بر	tein 1	1 lypro	RESULT 1 C41621 env poly	6 C E

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C:Accession: B28922
R;Gurgo, C.; Guo, H.G.; Franchini, G.; Aldovini, A.; Collalti, E.; I Virology 164, 531-536, 1988
A;Title: Envelope sequences of two new United States HIV-1 isolates A:Reference number: A28922; MUID:88219542; PMID:3369091
A;Accession: B28922
A;Molecule type: DNA
A;Residues: 1-861 <GUR>
Вþ
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                                                                                                                                                         C; Superfamily:
                                                                                                                                                                           A; Cross-references:
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C;Species: human imu
C;Date: 19-Mar-1997
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                                                                                                                                                                                            A; Molecule type: mRNA
A; Residues: 1-851 <CAR>
                                                                                                                                                                                                                                   A; Status: preliminary
                                                                                                                                                                                                                                                   A; Reference number: A; Accession: $33985
                                                                                                                                                                                                                                                                        submitted to the EMBL Data A; Reference number: S33979
                                                                                                                                                                                                                                                                                                                R; Carlini,
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Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                   Accession: S33985
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Date: 31-Dec-1990 #sequence_revision
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secies: human immunodeficiency virus type 1, HIV-1
ste: 19-Mar-1997 #sequence_revision 19-Mar-1997 #t
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 668
                                    YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                              Similarity
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                                                                                                                                                       retrovirus
                                                                                            97.4%;
97.2%;
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97.2%;
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97.2%;
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                                                                       Score 189; DB 2; Pred. No. 6.8e-15; O; Mismatches 0;
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3.9e-15;
nes 0;
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Cell 40, A; Title: R; Wain-Hobson, Cell 40, 9-17,

1985

sequence

of.

AIDS

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Danos, the

O.; Cole,

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17-May-1985 #text_change

16-Jul-1999

HIV-1

A:Note: host Homo sapiens (man) C:Date: 17-May-1985 #sequence_revision C:Accession: A03975

N;Alternate names: coat polyprotein C;Species: human immunodeficiency virus type 1,

env polyprotein precursor - human

immunodeficiency virus

type 1 (isolate LAV-la)

VCLJLV

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δÃ
                                                                                                                                                                                                                                A;Gene: env C;Superfamily: type E retrovirus env polyprotein C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; E;1-30/Domain: signal sequence #status predicted <SIG>
    밁
                                                                                                                                                                  F;31-511/Product: exterior membrane glycoprotein #status predicted <EXT>F;31-656/Product: transmembrane glycoprotein #status predicted <TMM>F;512-856/Product: transmembrane glycoprotein #status predicted <TMM>F;888.136.141,156.160,186.197.230,234.241,262.276.289.295,301.332,339,356,386,392,397,F;611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre
                                                                                                                                                                                                                                                                                                                                                                                                                                               nberger, J.A.; Papas, T.S.; Ghrayeb, J.; Chang, N.T.; Ga
Nature 313, 277-284, 1985
A;Title: Complete nucleotide sequence of the AIDS.virus,
A;Reference number: A93353; MUID:85111123; PMID:2578615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
C;Accession: A03973
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C; Species: human in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-854 <OBR>
C; Superfamily: type E retrovirus
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A; Residues: 1-856 <R
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Nature 348, 69-73, 1990
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                                                                                                       Query Match
Best Local
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638 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                       YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF
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s13288;
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97.28;
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97.28;
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                                                                                                       Score 189; DB 1;
Pred. No. 6.8e-15;
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J.; Chang, N.T.; Gallo, R.C.;
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                                                                                                                         Length 856;
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Wong-Staal,
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C;Date: 20-Feb-1995 *sequence_revision C;Accession: S21998; S70425 R;Steuler, H.; Storch-Hagenlocher, B.; submitted to the EMBL Data Library, July Submitted to the EMBL Data Library (July Submitted to the EMBL Data Library)
A; Molecule type: I
A·Residues: 1-358
                                                                                                                                                                                                               envelope protein gp120/gp41 - human immunodeficiency virus type
C;Species: human immunodeficiency virus type 1, HIV-1
A;Variety: isolate 28
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A; Residues: 1-140, 'X', 142-312, 'X', 314-357 <STE2>
A-Cross-references: EMBL:x61355; NID:g60179
Liperfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: EMBL:X61355; NID:g60179; PIDN:CAA43622.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        envelope protein gp120/gp41 - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    F;517-861/Product: transmembrane glycoprotein *status predicted <TMM>
F;88,136,141,146,161,165,191,202,239,246,267,281,294,300,306,337,344,361,391,397,402,411
F;616,621,630,642,679,755,821/Binding site: carbohydrate (Asn) (covalent) *status predic
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A; Accession: A03975
A; Molecule type: DNA
A; Residues: 1-861 <WAI>
                                                                       A; Reference number:
                                                                                                A; Description:
                                                                                                                                                                                                                                                                                       S21998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Species: human immun
A; Variety: isolate 27B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Superfamily:
                                         A; Accession: S21998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         submitted to the EMBL Data Library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Gene:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-357 <STE1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  :Keywords: AIDS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       preliminary
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Distinct populations of HIV-1 in blood and cerebrospinal fluid mber: S21990
                                                                                             Distinct
                                                                                                                                       Storch-Hagenlocher, B.; Wildemann, B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               type E retrovirus env polyprotein
DS; capsid protein; coat protein;
                           DNA
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97.2%;
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Pred No. 6.9e-15;
1: Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 188; DB 2;
Pred. No. 3.3e-15;
2; Mismatches 0;
                                                                                                                                                                                      20-Feb-1995 #text_change
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                                                                                           in blood and cerebrospinal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 357;
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A:Status: preliminary
A:Molecule type: DNA
A:Molecule type: DNA
A:Residues: 1-357 <ST2>
A:Cross-references: EMBL:X61356; NID:g60181; PIDN:CAA43624.1;
A:Experimental source: patient 27L
A:Note: submitted to the EMBL Data Library, July 1991
C:Superfamily: type E retrovirus env polyprotein
                                                                     A;Gene: env
C;Superfamily:
                                                                                                                                                                                                                                                                                                   envelope glycoprotein - human immunodeficiency virus type 1 (strain C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 24-N
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A; Title: Distinct populations of human immunodeficiency
A; Reference number: S70417; MUID:92144209; PMID:1736940
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C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
C;Accession: S70422; S21996
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A;Residues: 1-222,'X',224-358 <STE2>
A;Cross references: EMBL:X61359; NID:960182; PIDN:CAA43630.1; PID:960183
C;Superfamily: type E retrovirus env polyprotein
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                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-847 < PAN>
                                                                                                                                                                                    A; Accession: T09448
A; Status: preliminary; translated
                                                                                                                                                                                                                              submitted to the EMBL Data A; Reference number: Z16673
                                                                                                                                                                                                                                                                                     C; Accession: T09448
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AIDS Res. Hum.
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                                                                                                                                A;Cross-references: EMBL:U63632; NID:g1465777; PID:g1465781
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Best Local
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                                                                                                                                                                                                                                                                     .; Vinters, H.V.;
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                 Similarity
                                                                           type
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94.48;
                 94.8%;
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Library, July 1996
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             Pred. No.
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.3e-15;
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                   .7e-14;
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                                   Length 847;
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YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF

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C;Date: \hat{2}0\text{-Feb-}1995 #sequence_revision 20-Feb-1995 #text_change C;Accession: S22002; S70418
                                                                                                               envelope protein gp120/gp41 - human immunodeficiency virus C;Species: human immunodeficiency virus type 1, HIV-1 \,
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C;Date: 19-Mar-1997 #sequence_revision
C;Accession: S13289
C;Accession: S13289
    submitted
                          R;Steuler,
                                                                                            A; Variety:
                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus type 1 r
                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N;Alternate names: coat polyprotein
N;Alternate names: coat polyprotein
N;Contains: amino end of coat protein gp110
C;Species: human immunodeficiency virus type 1, HIV-1
A;Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
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Nature 348, 69-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Accession: A41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-847 < OBR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Title: HIV-1 tropism for mononuclear phagocytes can be A; Reference number: S13288; MUID:91043044; PMID:2172833
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  perfamily: type E retrovirus env polyprotein
eywords: AIDS; capsid protein; coateni; glycoprotein; immunodeficiency;
1-253/Product: coat protein gp120 (fragment) #status predicted <GP1>
254-445/Product: coat protein gp41 (fragment) #status predicted <GP2>
426-445/Domain: transmembrane #status predicted <TMN>
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Best Local
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nan immunodeficiency virus type 1, HIV-1
r-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
Storch-Hagenlocher, B.;
ne EMBL Data Library, Jul
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Pred. No. 2.7e-14;
B.; Wildemann,
July 1991
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                        B.; Hacke,
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Search completed: May 16, Job time: 12.1446 secs

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A; Residues: 1-358 <STE>
A; Cross-references: EMB
C; Superfamily: type E r
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                                                                                                                                                                                                                                                                                                                                                                                                       envelope protein gp120/gp41 - human immunodeficiency virus type
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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A;Accession: $70418
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-333,'X',335-358 <$TE2>
A;Cross-references: EMBL:X61352; NID:960186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency A;Reference number: S70417; MUID:92144209; PMID:1736940
В
                                                                                                                                                                                                                                                                                 A;Reference number: S21990
A;Accession. 20000
                                                                                                                                                                                                                                                                                                                                         R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991
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A; Residues: 1-358 <STE1>
A; Cross-references: EMBL: X61352; NID: g60186; PIDN: CAA43616.1;
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                                                                                                                                                                                                                                                        A;Status: preliminary
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91.7%;
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Pred. No. 1.8e-14;
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Pred. No. 1.8e-14;
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of HIV-1 in
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1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF
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ENV_HV1SC

ID ENV_HV1SC

STANDARD; PRT; 856 AA.

AC P05878;
DT 01-NOV-1988 (Rel. 09, Created)
DT 01-NOV-1988 (Rel. 09, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE Envelope polyprotein GP160 precursor (Contains: Exte glycoprotein (GP120); Transmembrane glycoprotein (GP GN ENV

OS Human immunodeficiency virus type 1 (SC isolate) (HI OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
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76	76	76	76	76	79	80	82	83	84	85	86
39.2	39.2	39.2	39.2	39.2	40.7	41.2	42.3	42.8	43.3	43.8	44.3
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383 87 129 135	376	228	219	125	118	53	760	511	ა ი ⊦	1	protein;	17; GP41;	PF00516; GP120;	IPR000777;	IPR000328;		VCF	.:		email t	quires	d this	non-profit	n Bioin	e Swiss	PROT en	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SOUTHE	ANEOUS:	4:531-5	equence	Wong-S	uo HG	19542	OM N.A.		11702;	troid v	odefici
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BY SIMILARITY. N-LINKED (GLCNAC) (POTENTIAL). N-LINKED (GLCNAC) (POTENTIAL). N-LINKED (GLCNAC) (POTENTIAL).			BY SIMILARITY.			BY SIMILARITY.	IN-FRAME TERMINATION CODON.		EXTERIOR MEMBRANE GLYCOPROTEIN		Polyprotein; Glycoprotein; Transmembrane;				41.			TED_CDS.	***************************************	@isb-sib.ch).	agreement (See http://w	is not removed. Usage by and for commerc	ong as its content is in no	Institute. There are no res		It is produced through a collaborati			SOLATE WAS TAKEN FROM AN ARC PATIENT IN		States	.C., Reitz M.S. Jr.:	ini G., Aldovini A., Collalti E.,	69091;				troviridae;	s type 1 (SC isolate) (HIV-1).

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RESULT 2
ENV_HVIW1
ID ENV_HVIW1
AC p31872;
DT 01-JUL-1993
DT 01-JUL-1993
DT 15-JUL-1993
DE Envelope pol
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MEDLINE-86218077; PubMed-2423250;

MEDLINE-86218077; Pahh B.H., Shaw G.M., McNeely P.D.,

Parks E.S., Parks W.P., Josephs S.F., Gallo R.C.,

"Identification and characterization of conserved

"Identification and characterization of the envelope gene of HTLV-III/LAV, the
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AIDS.";
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01-JUL-1993 (Rel. 26, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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SEQUENCE
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                                       InterPro; IPR000328; Env_GP41
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotei
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                                                                                                                                                1 45:637-648(1986).
MISCELLAREOUS: ISOLATES WMJ1, WMJ2, AND
BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A
WAS PERINATALLY INFECTED BY HER MOTHER.
RA24774; VCLJ3H.
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35; Conservative
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                                           Polyprotein;
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DT 13-AUG-1987 (Rel. 05, Created)
T 13-AUG-1987 (Rel. 05, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE Envelope polyprotein GP160 precursor (Contains: Extended to the contains of the c
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ss; Retroid viruses; Retroviridae; Lentivirus.
                                           313
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                                         nucleotide sequence
3:277-284(1985).
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TRANSMEMBRANE GLYCOPROTEIN.

BY SIMILARITY.

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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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MEDLINE-90317906; PubMed=2370688;

MIDLINE-90317906; Cheng-Mayer C., Bauer D., Levy J.A.,

York-Higgins D., Cheng-Mayer C., Bauer D., Levy J.A.,

"Human immunodeficiency virus type 1 cellular host ran

"eplication, and cytopathicity are linked to the enve-
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotein; Glycoprotein; Transmembrane;
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HIV; M38427; ENV$SF33.
InterPro; IPR000378; Env GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the viral genome.";
J. Virol. 64:4016-4020(1990).
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NCBI_TaxID=11690;
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16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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                                                                                                                                                                                                                                                                                                                                                                                                      Ratner L., Haseltine W., Patarca R., Livak K.J., Starcic Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A., Baumeister K., Ivanoff L., Petteway S.R. Jr., Pearson M. Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gwong-Staal F.;
                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                              AIDS; Coat
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                                                                                                                                                                                                                                                                                                   potential glycosylation sites of the type 1 immunodeficiency virus envelope glycoprotein Chinese hamster overv cells "."
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Gregory T.J.;
                                                                                                                                                                                                                                                                                                                                             DISULFIDE BONDS, AND CARBOHYDRATE-LINKAGE MEDLINE-90285159; PubMed-2355006; Leonard C.K., Spellman M.W., Riddle L., Ha
                                                                                                                                                                                                                                                                                                                                                                            "Complete nucleotide sequence of the Nature 313:277-284(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE-85111123; PubMed-2578615;
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NCBI_TaxID=11678;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                    inese hamster ovary cells.";
Biol. Chem. 265:10373-10382(1990).
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                                                                                                                      PF00516; GP120; PF00517; GP41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunodeficiency
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34; Conservative
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986 (Rel. 01, Last sequence)
996 (Rel. 38, Last annotation)
999 (Rel. 38, Daylor annotation)
polyprotein GP160 precursor
tein (GP120); Transmembrane
                                                                                                              protein;
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96663 MW;
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es; Retroviridae; Lentivirus.
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Pred. No. 1.1e
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                                                                      TRANSMEMBRANE
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orn E.A.,
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RESULT 6
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Ratner L., Fisher A., Jagodzinski L.L., Mitsuya H., Liou Gallo R.C., Wong-Stael F.;
Submitted (APR-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                     MEDLINE=87299196; PubMed=3040055; Ratner L., Fisher A:, Jagodzinski Gallo R.C., Wong-Staal F:;
                                                                                                                                                                                                                                                                                                 ENV_H71H2
P04578; 009779;
13-AUG-1987 (Rel. 05, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 38, Last annotation update)
Envelope polyprotein (GP160 precursor [Contains: glycoprotein (GP120); Transmembrane glycoprotein
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                                                                                                                 "Complete nucleotide virus.":
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NCBI_TaxID=11706;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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RESULT 7
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InterPro; IPR000777; GP120.
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15-JUL-1999 (Rel. 38, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              viruses; Retroid
NCBI_TaxID=11707;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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InterPro: IPR000777; GP120.
Pfam; PF005516; GP120; 1.
Pfam; PF00517; GP41; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   glycoprotein ENV.
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Lyprotein GP160 precursor (Contains: Exterior
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97.28;
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Retroviridae; Lentivirus.
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: glycoprotein (GP120); Transmembrane glycoproteir
                                                                                                                                                        EMBL; K02013;
EMBL; A04321;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Viruses; Retroid
NCBI_TaxID=11686;
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%1; A03975; VCLJLV. 

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DE 91/COPTOCEIN (GP120
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OC Viruses; Retroid vi
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RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=90347835; P
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RT "Viral determinants
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SEQUENCE FROM N.A.

MEDLINB=90347835; PubMed=2384920;
Cheng-Mayer C., Quiroga M., Tung J.W., Dina D., Levy J.;

"Viral determinants of human immunodeficiency virus type 1 T-cell macrophage tropism, cytopathogenicity, and CD4 antigen modulation
                                                                                                       01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last seq
15-JUL-1999 (Rel. 38, Last ann
Envelope polyprotein GP160 pre
glycoprotein (GP120); Transmem
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Viruses; Retroid viruses;
NCBI_TaxID=11691;
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97.28;
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es; Retroviridae;
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TRANSMEMBRANE GLYCOPROTEIN.

BY SIMILARITY.

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use by non-profit institute. There are no restrictions on it; modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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InterPro: IPR000777; GP120.
Pfam; PF00516; GP120; 1.
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Interpro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotei
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Viruses; Retroid viruses
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Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R., Markham P.D. Salahuddin S.Z., Wong-Staal F., Gallo R.C., Parks E.S., Parks "Genetic variation in HTLV-III/LAV over time in patients with at risk for AIDS.",
at risk for AIDS.",
Science 232:1548-1553(1986).
Science 232:1548-1553(1986).
HISCOLIANEOUS: ISOLARES WMJ1, WMJ2, AND WMJ3 WERE OBTAINED BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A TWO-YEAR OLD HAITI WAS PERINATALLY INFECTED BY HER MOTHER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1988 (Rel. 09, Created)
01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; M12507;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        M12507; ENV$WMJ2.
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94.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      virus type 1 (WMJ2 isolate) (HIV-1).
es; Retroviridae; Lentivirus.
EXTERIOR MEMBRANE GLYCOPROTEIN.

BY SIMILARITY.

BY GLCNAC. .) (POTENTIAN

N-LINKED (GLCNAC. .) (POTENTIAN)
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Pred. No. 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WMJ3 WERE OBTAINED FROM TWO-YEAR OLD HAITIAN WHO
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MBL outstation .
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                                                                                                                                                                                                                                                                                                                                               01-OCT-1989
01-OCT-1989
15-JUL-1999
Envelope pol
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P12489;
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MEDILINE-89352108; PubMed-2669897;
Komiyama N., Hattori N., Inoue J.
"Nucleotide sequences of gag and of "Nucleotide sequences" in bac-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CARBOHYD
                                                                                                                                                                                                                                                                                                       Human immunodeficiency virus type 1 (JH3 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus.
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                                                                     AIDS;
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                                                                                                HIV; M21138; ENV$JH3.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                    EMBL; M21138; AAB03526.1; -. HIV; M21138; ENV$JH3.
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                                                                                                                                                                                                                          Leotide sequences of gag and env genes of and their expression in bacteria."; Res. Hum. Retroviruses 5:411-419(1989).
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                                                                              PF00516; GP120; PF00517; GP41;
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34; Conserv
                                                                                                                                                                                                                                                                                                                                  389 (Rel. 12, Created)
989 (Rel. 12, Last sequence update)
989 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation [Contains: Exterior polyprotein GP160 precursor [Contains: Exterior tein (GP120); Transmembrane glycoprotein (GP41)].
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94.48;
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EXTERIOR MEMBRANE GLYCC
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Pred. No. 3.56
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                                                                    Glycoprotein;
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                             GLYCOPROTEIN
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a Japanese isolate o
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                                       GLYCOPROTEIN.
                                                                    Transmembrane;
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                                                                  MEDLINE=88219542; PubMed=3369091; Gurgo C., Guo H.-G., Franchini G., Aldovini A Farrell K., Wong-Staal F., Gallo R.C., Reitz "Envelope sequences of two new United States Virology 164:531-536(1988).
-!- MISCELLANEOUS: THE MN ISOLATE WAS TAKEN F PATIENT IN 1984.
                                                                                                                                                                                                                                                                                                                                                                                                       ENV_HV1MN
P05877;
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                        Human immunodeficiency
Viruses; Retroid viruse
                                                                                                                                                                                                                                                                                                             Envelope poly glycoprotein
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                                                                                                                                                                                                      SEQUENCE FROM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                       988 (Rel. 09, Created)
988 (Rel. 09, Last sequence update)
989 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains: Exterior membrane
tein (GP120); Transmembrane glycoprotein (GP41)].
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423
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                                                                                                                                                                                                                                                         virus type 1 (MN es; Retroviridae;
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MEDLINB-#85090453; PubMed-2578227;
Sanchez-Pescador R., Power M.D., I
Stemplen M.M., Brown-Shimer S.L.,
Levy J.A., Dina D., Luciw P.A.;
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

. 16	15	14	13	12	11	10	9	æ	7	6	U	4	ω	Ν	1	Result No.
191	191	191	191	191	191	191	191	191	191	191	191	192	192	192	194	Score
98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	99.0	99.0	99.0	100.0	Query Match
858	858	857	856	856	851	851	849	849	841	443	42	855	854	838	848	Length !
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	DB
08UL88	06TD80	Q8UL70	041539	Q72993	Q8Q852	056110	080851	Q77368	041556	Q80023	Q69910	Q03805	Q78225	Q03806	Q69990	ID
human		Q8u170 human immun		Q72993 human immun	Q8q852 human immun	$\overline{}$	human	-	human	Q80023 human immun		_	Q78225 human immun	Q03806 human immun	Q69990 human immun	Description

45	44	43	42	41	40	39	38	37	36	35	34	33	32	<u>3</u>	30	29	28	27	26	25	24	23	22	21	20	19	18	17
189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	190	191	191	191	191	191	191	191	191	191	191	191	191
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Q74090	Q74599	092877	Q9E1R7	Q72502	Q85582	Q89797	Q69992	Q78243	Q70608	Q70605	Q70604	Q70606	Q70607	Q993A6	Q9YXR3	886690	Q8UL86	Q8UL74	Q8UL78	Q8UL82	Q8UL83	Q8UL84	080850	Q8UL73	Q8UL77	Q8UL79	Q8UL80	Q8UL85
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Q74090	Q74599	. 092877	Q9e1r7	Q72502	Q85582	Q89797	Q69992	Q78243	Q70608	Q70605	Q70604	Q70606	Q70607	Q993a6	Q9yxr3	069988	Q8u186	Q8u174	Q8u178	Q8u182	Q8u183	Q8u184	Q8q850	Q8u173	Q8u177	Q8u179	Q8u180	Q8u185
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ALIGNMENTS

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٠.	65.1; Env GP41	MCEVILLY M.M.; Submitted (APR-1994) to the EMBL/GenBank/DDBJ databases.	STRAIN=651;	SEQUENCE FROM N.A.	(MHI 1994) CO CHE EMBL/GenBank/DDBO	NIAID/NIH DAIDS Variation Program; Submitted (MAY-1994) to the EMRI/GenBank/DDRI databases	STRAIN=651;	SEQUENCE FROM N.A.	(1996).	nd NIAID Networks for HIV Isolation and Characterization.":	ency virus type 1 sequence subtypes A throu	"Molecular cloning and analysis of functional envelope genes from	R.H.:	von Briesen H., Beddows S., Weber J., Sharp P.M., Shaw G.M.,	M Galvan-Castro B	Gao F., Morrison S.G., Robertson D.L., Thornton C.L., Craig S.,	MEDLINE=96190564; PubMed=8627686;	51:	SEQUENCE FROM N.A.	[1]		es: Ref	Human immunodeficiency virus type 1	ENV.	a wantain (Bramant)	01-NOV-1996 (TrEMBLrel. 01, Last sequence update) 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)	(TrEMBLrel.	•	Q69990 PRELIMINARY; PRT; 848 AA.	0 +

AIDS; Coat protein; NON_TER 1

Glycoprotein; Polyprotein; Transmembrane

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RESULT
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update
Envelope polyprotein GP160 precursor [CONTAINS. 7]
ENV
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InterPro: IPRO00377; GP120.
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NCBI_TaxID=11676;
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36; Conserv
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Reitz M., Beaver B.;

SEQUENCE FROM N.A. Reitz M., Popovic

Gartner

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Gallo

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Reed-Connole

EMBL/GenBank/DDBJ databases

Viruses; Retroid viruses; NCBI_TaxID=11676;

Human immunodeficiency virus type 1

Retroviridae;

Lentivirus

polyprotein

precursor

Last sequence update)
Last annotation update)
precursor [CONTAINS: GP120;

GP41].

6 (TrEMBLrel. 6 (TrEMBLrel. 1 (TrEMBLrel.

1. 01, C 1. 01, f el. 17, GP160

Created)

ENV Envelope

Submitted (XXX-1992) to the ENEMBL; M6803, AAA44191.1; ...
Interpro; IPR0003728; Env_GP41.
Interpro; IPR000777; GP120.

GP120;

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InterPro; IPRO00328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
Pfam; PF00517; GP41; 1.
SEQUENCE 854 AA; 97186 MW;
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Q78225;
Q1-NOV-1996
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CARBOHYD
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Q03805
Q03805;
Q1-NOV-1996
Q1-NOV-1996
Q1-JUN-2001
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                                                                                                                                                                                                        "Identification of the envelope cell tropism in HIV-1."; Science 253:71-74(1991).
                                                                                                                                                                                                                                                                                                          ENV
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T.J., Lyerly H.K., Cul
of the envelope V3 loop
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es; Retroviridae;
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Glycoprotein;

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Q69910;
Q1-NOV-1996
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CARBOHYD
Conley A.J., Kessler J.A., Boots L.J., Tung J.S., Arnold E Keller P.M., Shaw A.R., Emini E.A.; "Neutralization of divergent human immunodeficiency virus variants and primary isolates by IAM-41-2F5, an anti-gp41
                         SEQUENCE FROM N.A.
MEDLINE=94211861; PubMed=7512731;
                                                                            01-NOV-1996
01-DEC-2001
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19,
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                                                   Retroviridae;
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Pred. No. 2.7e
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EXTERIOR MEMBRANE GLYCOPROTEIN (GP120)
                                                       Tung J.S., Arnold B.A.,
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Best Local.
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Best Local
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Q80023;
01-NOV-1996
01-NOV-1996
01-DEC-2001
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                                                        Viruses; Retrora
NCBI_TaxID=11676;
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041556; OT: JAN-1998 (TrEMBLrel. 05, Creat
01-JAN-1998 (TrEMBLrel. 05, Last
01-DEC-2001 (TrEMBLrel. 19, Last
Envelope glycoprotein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE-92107924; PubMed=1763038;
MEDLINE-92107924; Flaherty K.,
A-friction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 monoclonal antibody.";
Proc. Natl. Acad. Sci. U.S.A.
EMBL; U06740; AAA19153.1;
InterPro; IPR000328; Env_GP41.
Pfam; PF00517; GP41; 1.
SEQUENCE FROM N.A. STRAIN=C17; MEDLINE=98105804;
                                                                                       Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
                                                                                                                               ENV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diversity among close contacts.";
proc. Natl. Acad. Sci. U.S.A. 88:11236-11240(1991).
EMBL; M77230; AAB03792.1; -.
InterPro; IPR000328; Env_GG41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
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"Evolution of human immunodeficiency virus type 1 nucleotide
diversity among close contacts."
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35; Conserv
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97.2%;
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Last annotation updat
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l; Mismatches
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No. 1
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Best Local Similarity 97.2
Matches 35; Conservative
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Matches
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01-JUN-2002
01-JUN-2002
01-JUN-2002
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01-NOV-1996
01-DEC-2001
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Q77368;
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein;
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                                                                                                                                                                                 080851
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J. Virol. 72:1552-1576(1998).
EMBL; U84814; AAC58844.1;
                             Human immunodeficiency Viruses; Retroid viruse NCBI_TaxID=11676;
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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J. Virol. 72 1552-1572/7000.
   SEQUENCE
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849 AA;
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(TrEMBLrel.)
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GTTEMBLTel.
GTTEMBLTel.
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97.2%;
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Retroviridae;
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Pred. No. 3.6e-15;
1; Mismatches 0;
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No. :
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3.6e-15;
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.J., McDonald
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OS611
ID OS611
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CRAVEL
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OX NCBL.
CRN I1
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DR Pfam
DR PFAMS:
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Best Local S
Matches 35
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Best Local Similarity
Matches 35; Conser
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Q8Q852;
Q1-JUN-2002
Q1-JUN-2002
Q1-JUN-2002
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056110;
01-JUN-1998
01-JUN-1998
01-JUN-2002
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Daniels R.S., Patel D., Xiang Z., Zheng N.N., Kang C.;
"Evidence for the spread of immune-escape HIV-1 subtype
Korean population.";
Submitted (CCT-2001) to the EMBL/GenBank/DDBJ databases
EMBL; AJ417427; CAD10139.1;
-
SEQUENCE 849 AA; 96428 MW; FD660E39D1895C27 CRC64;
                                                           Viruses; Retroid
NCBI_TaxID=11676;
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STRAIN=KR3026;
Daniels R.S.,
                                                                                                                    ENV
                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00071; GAPDH; UNKNOWN_1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane
SEQUENCE 851 AA; 96516 MW; 1CDAC83EE6464531 CRC64;
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EMBL; AF025756; AAC40593.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Diversity of the human immunodeficiency virus type glycoprotein in San Francisco Men's Health Study par
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=98178716; PubMed=9519894; McCutchan F.E., Sanders-Buell E.,
                                SEQUENCE FROM N.A.
                                                                                                                                   Gp160.
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Viruses; Retroid viruses; Retroviridae;
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IPR000173; GAP_dhdrogenase.
IPR000777; GP120.
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   Patel
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Pred. No. 3.6e
1; Mismatches
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Matches 35; Conser
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041539;
01-JAN-1998
01-JAN-1998
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SEÓUENCE FROM N.A.
STRAIN-C10;
STRAIN-C10;
MEDLINE-98105804; PubMed-9445059;
Connor R.I., Korber B.T.M., Graham
                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., Schultemaker H., Guillon C., Bedin F., Fouchier R.A.M., Schultemaker H., Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases EMBL; U34604; AAC54649.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.

MEDLINE=96288454; PubMed=8679299;

Guillon C., Bedin F., Fouchier R.A., Schuitemaker H., Gruters

"Completion of nucleotide sequences of non-syncytium-inducing
syncytium-inducing HIV type 1 variants isolated from the same
patient.";
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                                                                                                  Human immunodeficiency virus
Viruses; Retroid viruses; Ret
                                                                                                                                                  Envelope
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                                                                                   NCBI_TaxID=11676;
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Viruses; Retroid virus
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856 AA;
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96685 MW; BD!
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Retroviridae;
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Q8UL70: O1-MAR-2002 (TrEMBLrel. :
01-MAR-2002 (TrEMBLrel. :
01-JUN-2002 (TrEMBLrel. :
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Q8UL90;
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                             Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae; NCBI_TaxID=11676;
                                                                                   ENV
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Pfam; PF00517; GP41; 1.
SEQUENCE 857 AA; 97590 MW;
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InterPro;
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NCBI_TaxID=11676;
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Pfam; PF00517; GP41; 1.
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                                                                                                 Gp160
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InterPro; IPR000777; GP120.
   SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zheng N.N., Vella C.,
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Retroviridae;
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1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                              3FE27F181D19DB31 CRC64;
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                                                                                                                sequence up
annotation
                                                                                                                                                                                 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Daniels R.S.;
                                                                                                                                                                                                                                                                                                                                            DB 15;
3.6e-15;
                                                   Lentivirus
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Gaps

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857; 0;

blood mononuclear cells

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                                       Qy
                                                                                         Query Match 98.5%;
Best Local Similarity 97.2%;
Matches 35; Conservative 1
                                                                                                                                                                                 Zheng N.N., Vella C., Easterbrook P.J., Daniels R.S.;
"Selection on isolation of HIV-1 in peripheral blood mononuclear cells and Herpesvirus salmiri transformed T-cells is comparable.";
Submitted (CCT-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; Ad418496; CAD10906.1; ...
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PP00516; GP120; 1.
Pfam; PP00517; GP41; 1.
SEQUENCE 858 AA; 97600 MW; 444D66861F6C0355 CRC64;
Score 191; DB 15; Length 858; Pred. No. 3.6e-15; 1; Mismatches 0; Indels
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                                                                           Query Match
Best Local Similarity
Matches 35; Conserv
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ad form
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; angiogenic factor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAY-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY89136;
                                                                                                                                                                        Sequence
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hybrid polypeptides.
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                                                                                                                                                                        36 AA;
                                                                                      Conservative
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97.2%;
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                                                                                 Score 192; DB 21;
Pred. No. 6.5e-17;
1; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lambert DM;
                                                                                                                           Length 36;
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                                                                                 Gaps
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Search completed: May 16, 2003, 11:12:06 Job time: 32.4578 secs

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                                Query Match
Best Local S
Matches 35
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                                                                                                                                                                                             The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor, interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and
                                                                                                  Sequence
                                                                                                                                               anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 22; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A new hybrid polypeptide with enhanced comprises enhancer sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TRIM-) TRIMERIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; angiogenic factor.
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                                                                                                                               form hybrid polypeptides.
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                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    enhancer sequence
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                                Conservative
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                                                                                                  ΑA;
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97.2%;
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                                Score 192; DB 21;
Pred. No. 6.5e-17;
1; Mismatches 0
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Pred. No. 6.5e-17;
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                                                               Length 36;
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RESULT 14
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                                                                 Matches
                                                                                 Query Match
Best Local
                                                                                                                                                                              function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bloactive peptides selected from a growth factor, cytokine, differentiation factor, interfeukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAV88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                               The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can
                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A new hybrid polypeptide with enhanced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1. HIV-2. SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; angiogenic factor.
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                                                                               Local
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                                1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                 Similarity
                                                                                                                                                                  hybrid polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    enhancer sequence
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                                                                                                                                   36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page 30;
                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                   AA;
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97.2%;
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                                                                                 Score 192;
Pred. No. 6.
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                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pharmacokinetic properties
                                                                                 DB 21;
                                                                 0;
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                                                                                               Length 36;
                                                                 Indels
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AAY89136 ID AAY8

AAY89136 standard;

peptide;

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RESULT 15

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           Collined peptides derived from the C-helical domain of the gp41 corresponded to a broad spectrum of relates to raising a neutralising antibody response to a broad spectrum of HIV-1 isolates. The invention of relates to raising a neutralising antibody response to a broad spectrum of HIV-1 isolates, comprising the administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or confinite the coiled coil solution structure of the N-helical domain country into the coiled coil solution structure of the N-helical domain correspond to or the helical region), or can correspond or mimic the C-helical commin (the transmembrane-proximal amphipathic alpha-helical segment), cor the gp41 core 6-helix bundle, which is formed by the interaction core the N- and C-helical domains of three gp41 proteins. The peptides can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be alternately linked together to form a peptide which mimics the core core 6-helix bundle. Administration of the peptides against gp41 are well control of the proteins of g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gp41 transmembrane-proximal amphipathic alpha-helical segment;
core 6-helix bundle; viral entry inhibition; immunogenic;
antibody; humoral response; broad spectrum vaccine; anti-HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB14533;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     comprises administering a polypeptide capable of forming a stable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200040616-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  envelope glycoprotein; prophylaxis; therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB14533 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         coiled-coil solution structure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Raising neutralizing antibody response to human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-465959/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-JAN-1999; 99US-0115404
07-JAN-2000; 2000US-0480336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequences AAB14532-B14534 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (WILD/) WILD C T. (WEIS/) WEISS C D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JAN-2000; 2000WO-US00456
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35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gp41 C-helical domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 12; 97pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Weiss CD
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antibodies may
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 192;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB14569-B14602 represent specifically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ΑA
be
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effective
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range
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RESULT 12
AAY88665
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Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    composition comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV
                                                                               sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptides are bloactive peptides selected from a growth factor, cytokine, differentiation factor, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences ANY8651-Y9055 represent core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HIV strains and isolates. The peptide compositions may be administered as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect uninfected cells. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A new hybrid polypeptide with enhanced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-136792/12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Core polypeptide fragment T No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 21; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         colony stimulating
                                                    polypeptide fragments that can be used in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              enhancer sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0082279:
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97.2%;
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Pred. No. 6.5e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
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                                                              Some sequences
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those indicated also comprise enhancer fragments at terminal ends

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                                                                                                                                                                                                                                                                                                                                       RESULT 9
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                     Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is a peptide fragment of T20/Dp178. T20/Dp178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/Dp178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/Dp178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
WPI;
                                                                      05-MAY-1999;
                                                                                            05-MAY-2000;
                                                                                                                     09-NOV-2000
                                                                                                                                            WO200066622-A1
                                                                                                                                                                  Human immunodeficiency
                                                                                                                                                                                                   Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response
                                                                                                                                                                                                                                        T20/DP178 peptide
                                                                                                                                                                                                                                                                 23-FEB-2001
                                                                                                                                                                                                                                                                                         AAB52688;
                                                                                                                                                                                                                                                                                                             AAB52688 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; Page 24; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Administration of peptide agents with a sequence partial length T20/DP178 or T21/DP107 formyl pept
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2000-656493/63
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                                              US DEPT HEALTH & HUMAN SERVICES
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                     Oppenheim
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                                                                                             2000WO-US12371
                                                                                                                                                                                                                                                                (first entry)
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                                                                    99US-0132686
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                                                                                                                                                                                                                                          fragment #66.
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                       , LT
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                                                                                                                                                                                                                                                                                                                                                                                                                                   98.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modulate inflammation
                                                                                                                                                                  virus type
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                      Ś
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                                                                                                                                                                                                                                                                                                                                                                                                                     Score 192; DB 21;
Pred. No. 6.5e-17;
1; Mismatches 0;
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                      Gong W,
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                                                                                                                                                                                                    inflammatory response up-regulation;
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                      Murphy PM;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 36;
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AAB52818
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Best Local
         The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an
                                                                                                                                              Claim
                                                                                                                                                                         Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                               Wang JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemoattractant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
                                                                                                                                                                                                                                                                                             (USSH)
                                                                                                                                                                                                                                                                                                                            05-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antiinflammatory; T20/DF formyl peptide receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T20/DP178 peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the yp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Administration of peptide agents with a sequence corresponding to partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
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                                                                                                                                             14; Page 40; 148pp;
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                                                                                                                                                                                                                                                                Oppenheim JJ,
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                                                                                                                                                                                                                                                                                                                                                      2000WO-US12371
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                                                                                                                                                                                                                                                                                                                           99US-0132686.
                                                                                                                                                                                                                                                                                             HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T20/DP178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fragment #97.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide;
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97.2%;
                                                                                                                                                                                                                                                                                             & HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P178; gp41 ectodomain; HIV-1 fusion; family; FPR; inflammatory response
                                                                                                                                                                                                                                                                Su
                                                                                                                                             English.
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1; Mismatches
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'n. 6.
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.5e-17;
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RESULT 6
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                            οy
                                                                                                                                                          The present sequence represents an N- and C-terminal modified peptide, designated T-20 (or DP-178), corresponding to amino acids 638-673 of the transmembrane protein gp41 of HIV-1 LAI isolate.

The invention relates to methods for the synthesis of peptides, in particular T-20 and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T-20-like peptide. The invention chains to yield the final T-20 or T-20-like peptide. The invention also relates to individual peptide fragments (see AAY31956-73) which act as intermediates in the synthesis of peptides of interest (e.g. T-20), and to particular groups of peptide fragments which act as intermediates in the synthesis of the peptide fragments. The invention of the particular groups of peptide fragments which act as intermediates in the synthesis of the peptide fragments. The method allows for the large scale, economical production of high
                                                            Query Match
Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                                      Methods of peptide synthesis,
T-20 like peptides -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAR-1998;
01-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 102; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-591038/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kang M, Bray B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-MAR-1999;
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                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TRIM-) TRIMERIS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus type 1
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peptides.
                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide T-20 (DP-178)..
                                                                                                                      36 AA;
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV-1 LAI; gp41; peptide synthesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0045920.
98US-0071877.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US06230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "N-terminal acetyl"
36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note- "C-terminal amide"
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                                                                         98.0%;
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                                                                         Score 192; DB 20;
Pred. No. 6.5e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   particularly used to produce T-20
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                                                              Mismatches
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                                                                                        Length 36;
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RESULT 7 AAY31974

Antiinflammatory: T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response up-regulation;

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                                                                                                                                                                                                RESULT 8
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Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                               relates to methods for the synthesis of peptides, in particular C- and N-terminal modified T-20 (see AAV31955) and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates (see AAV31956-73) of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T-20-like peptide, followed by deprotection of the side chains to yield the final T-20 or T-20-like peptide. The invention also relates to individual peptide fragments which act as intermediates in the synthesis of peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of peptide fragments which act as intermediates in the synthesis of the peptide of interest. The method allows for the large scale,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents a peptide, designated T-20 (or DP-178), that corresponds to amino acids 638-673 of the transmembrane protein 9p41 of HIV-1 LAI isolate. The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAR-1998;
01-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T-20; DP-178; HIV-1 LAI; gp41; peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HIV-1 LAI gp41 T-20 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 9; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods of peptide synthesis, particularly used to produce T-20 like peptides \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kang M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAR-1999;
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                                                               T20/DP178 peptide fragment #33.
                                                                                                23-FEB-2001
                                                                                                                                 AAB52655;
                                                                                                                                                                 AAB52655 standard;
                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                    economical
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                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                    production of high purity peptides.
                                                                                                                                                                                                                                                                                                                                                                                   36 AA;
                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                              (first entry)
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98US-0071877.
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                                                                                                                                                                 Peptide;
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97.2%;
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                                                                                                                                                                 36 AA
                                                                                                                                                                                                                                                                                                               Score 192; DB 20;
Pred. No. 6.5e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mader C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthesis
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                                                                                                                                                                                                                                                                                                                                              Length 36;
                                                                                                                                                                                                                                                                                                                    Indels
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RESULT 4 AAY22912

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Best Local :
                                                                                                                                                                                                                                                                                                                              Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain
                                                                                                                                                                           constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable forms of "floppy" peptides or proteins.
                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 233-234; 279pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-286866/25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-JUN-1997;
06-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9820036-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HIV; gp41 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY22912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY22912 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-AUG-1999
                                  1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                         35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antibody; viral membrane fusion; viral infectivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 108
                                                                                                                                                36 AA;
                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0876698.
96US-0743698.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 from W09820036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97WO-US20069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        constrained helical peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide;
                                                                                        98.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      McDowell RS,
                                                                     Score 192; DB 19;
Pred. No. 6.5e-17;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Phelan JC,
 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV infection;
                                                                                                          Length 36;
                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Starovasnik
                                                                       0
                                                                       Gaps
                                                                       0;
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ДЪ δÃ

1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF

Matches Query Match

Local Similarity nes 35; Conserv

Conservative

98.0%; 97.2%;

Score 192; DB 19; Pred. No. 6.5e-17;

Length 36 Indels

Mismatches

0;

0;

Gaps

0;

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RESULT 5
AAY22805
x S x
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                                     available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for of synthetic antibody clones from phage display libraries, of forms of "floppy" peptides or proteins.
                                                                                                                         HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily of ligands).
                                                                                                                                                                                               infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 143-144;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV; gp41 protein; constrained helical peptide; HIV vaccine; antibody; viral membrane fusion; viral infeligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY22805;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-MAY-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-AUG-1999 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY22805 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY22805-Y22917 are derived from Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 from WO9820036
36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0876698
96US-0743698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97WO-US20069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AΑ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Phelan JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      infectivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Starovasnik MA;
                                                                                      for isolation
                                                              or as stable
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RESULT 2
AAR98398
ID AAR9
X K K K X D X D X A X
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR64364 is designated DP-178, and corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein 9p41. It forms a putative alpha helix at the C-terminal end of the 9p41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein protein interactions, and possess anti-viral activity. Homologues of these peptides were identified by a computer assisted peptide sequence search. The peptides inhibits transmission to uninfected cells, and can also be used as type and/or subtype specific diagnostic tools.
                                                                                                                                                                                                                                                                                                                   Antifusogenic activity; antiviral capability; coiled-coil peptide; ALLMOTI5; 107x178x4; PLZIP search motif; viral transmission; HIV; influenza virus; hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1995-036105/05
                                 Inhibiting viral transmission, isolated peptide recognised by sequence search motif
                                                                                                                                                                                 06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                  DP178 corresponds to residues 638-673 of HIV-1(LAI) gp41
                                                                                                                                                                                                                                                                                                                                                                                             17-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Computer search generated synthetic
       Disclosure; Fig 1;
                                                                                   WPI; 1996-309517/31.
                                                                                                           Matthews
                                                                                                                      Barney
                                                                                                                                              (TRIM-) TRIMERIS INC (UYDU-) UNIV DUKE.
                                                                                                                                                                                                                     20-DEC-1995;
                                                                                                                                                                                                                                             27-JUN-1996.
                                                                                                                                                                                                                                                                      WO9619495-A1
                                                                                                                                                                                                                                                                                           Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR98398 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYDU-) UNIV DUKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                 v SO,
a TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36 AA;
                                                                                                          Bolognesi DP,
, Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bolognesi DP,
, Wild CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                  95US-0470896
94US-0360107
                                                                                                                                                                                                                     95WO-US16733.
           471pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                             peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English
                                                                                                          Lambert DM, Wild CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lambert
                                                                                                                                                                                                                                                                                                                                                                                                                                             36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 192; DB 16; Pred. No. 6.5e-17;
                                              e.g.
an AI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                              g. HIV or I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      peptides -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matthews
                                                                                                                      Langlois
                                           RSV, to a cell - using . 107x178x4 or PLZIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        are
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inhibitors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of
                                                           an
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В Ş

1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36

Matches

Conservative

0

Indels

0;

Gaps

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AAW17011
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Best Local S
Matches 35
                    Query Match
Best Local 9
                                                                                                                                         AAW17011 represents a peptide designated DP-178, a peptide derived from HIV type 1 glycoprotein 41 (gp41) transmembrane protein. The peptide corresponds to residues 638-673 of gp41. DP-178 and its derivatives are used in combination with a therapeutic agent, e.g.
                                                                                                                                                                                                                                      Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent – useful for treatment of HIV infection, inhibiting replication or transmission of HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequences given in AAR98398-408 represent peptides which exhibit antifusogenic activity, antiviral capability and/or the ability to modulate intracellular processes involving coiled-coil peptide structures. These peptides are recognised by the ALLMOTI5, 107x178x4 and PLZIP search motifs. These peptides may be used to inhibit the transmission of a virus, pref. HIV, influenza virus, or hepatitis B virus, to a cell.
                                                                                                reverse transcriptase, viral protease, cytokine, glycosylation or vira mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication or inhibiting transmission. They may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV; SIV: human; simian immunodeficiency virus; gl: transmembrane; antiviral; DP-178; DP-107; vaccine;
                                                            Sequence
                                                                                       also be
                                                                                                                                                                                                              Claim 2; Figure 1; 84pp;
                                                                                                                                                                                                                                                                                                WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                                                                           06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus type 1 LAI isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW17011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW17011 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                          Johnson
                                                                                                                                                                                                                                                                                                                                                                               07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                      19-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9640191-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    replication;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV-1 derived peptide useful for treatment of HIV infection.
                                                                                                                                                                                                                                                                                                                                                    (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
    l Similarity
35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  l Similarity 97.2
35; Conservative
                                                                                                                                                                                                                                                                                                                        RM,
                                                                                       used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36 AA;
                                                            36 AA;
                                                                                       in vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transmission.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                          Lambert
                                                                                                                                                                                                                                                                                                                                                                               95US-0481957
                                                                                                                                                                                                                                                                                                                                                                                                           96WO-US09499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide;
                  98.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                          DM;
                                                                                                                                                                                                              English.
                                                                                     for protecting
Score 192; DB
Pred. No. 6.5e
1; Mismatches
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                192; DB 17;
No. 6.5e-17;
                                                                                      against
                  DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36
                                 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    glycoprotein 4
ne; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                       infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                      esp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                      bу
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Result
No.
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        l number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to Pscore greater than or equal to the score of the result being and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                       Score
        length: 0
length: 2000000000
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Match Length
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1: /SIDS2/gcgdata/c
2: /SIDS2/gcgdata/c
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Gapop 10.0 , Gapext 0.5
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147.792 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                         /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA198, DAT:
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA199, DAT:
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2000, DAT:
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2000, DAT:
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2001, DAT:
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2002, DAT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1985.DAT:*
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      AAR64364
AAR98398
AAW17011
AAY22912
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AAY31955
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AAY31975
AAB52688
AAB52688
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36
HIV-1 derived pept SEQ ID NO. 108 from SEQ ID NO. 1 from Synthetic peptide HIV-1 LAI 9941 T-2 T20/DP178 peptide T20/DP178 peptide T20/DP178 peptide
                                                                                                                                                                                                                     Description
                                                                                                                                       DP-178 derived fro
DP178 corresponds
HIV-1 derived pept
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iral core	ABB0197	6 2		9	5
iral core	ABB0148	6 2	8	9	44
iral DP178	ABB0141	6 2		9	43
ral DP178	ABB0139	6 2	8	9	42
1 DP178/	ABB0139	6 2	8	9	1
uorescein	ABB0118	6 2	8	9	0
ral DP178/1	ABB0114	6 2	8	9	39
ral DP17	ABB0110	6 2	8	9	8
ral DP178/1	ABB0083	6 2	8	9	37
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HIV-1 isolate	AAB1453	6 2	œ		<u>ب</u>

antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI; human immunodeficiency virus; transmembrane protein; gp41; alpha helix; leucine zipper; DP-185. DP-178 derived from HIV-1 isolate LAI has antiviral activity. AAR64364 standard; Peptide; 36 24-AUG-1995 (first entry) AA.

ALIGNMENTS

PR	X P ?	Y P D	Y P N	YY TT T	FT	FT T	T H	XX SO	XX	KΨ	X >	DE	XX	AC XX	RESU AAR6 ID XX
07-JUN-1993;	07-JUN-1994;	22-DEC-1994.	WO9428920-A.		Modified-site		Key Modified-site	Synthetic.	alpha helix; l	human immunode	antiviral acti	DP-178 derived	24-AUG-1995 (AAR64364;	RESULT 1 AAR64364 ID AAR64364 stand XX
93US-0073028.	94WO-US05739.			/note= "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier gp. attached"	macromolecular carrier gp. attached"	<pre>/note= "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic or</pre>	Location/Qualifiers		alpha helix; leucine zipper; DP-185.	human immunodeficiency virus; transmembrane protein; gp41;	vitv: DP-178: DP-107: diagnostić: HIV-1LAI:	DP-178 derived from HIV-1 isolate LAI has antiviral activity.	(first entry)		T 1 364 AAR64364 standard; Peptide; 36 AA.

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Query Match
Best Local Similarity
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SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 81
LENGTH: 232
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
Search completed: May 16, 2003, 12:10:25 Job time: 15.759 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic ; OTHER INFORMATION: peptide US-10-059-271-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-059-271-82
                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 97

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 82

LENGTH: 254

TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
3-10-059-271-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 82, Applica Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 96.9
Best Local Similarity 97.3
atches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
FILE REFERENCE: ALBRE-22
FILE REFERENCE: ALBRE-22
                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: DE 101 06 295 PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: DE 101 06 295 PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: REPKE, HEINRICH
                                                                   1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
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No. US20030082208A1
                                                                                                                                             Conservative
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97.2%;
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Pred. No. 1.7e-15;
0; Mismatches 1;
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Pred. No. 1.5e-15;
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                                                                                                                                                                           Length 254;
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2 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 37

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                                                                                   US-10-040-349B-2
                                                                                                    RESULT 12
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Patent No. US20020094521A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 41,
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Best Local Similarity
Sequence 2, Application US/10040349B Publication No. US20030082521A1 GENERAL INFORMATION: APPLICANT: Brasseur, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/09779451 Patent No. US20020094521A1
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wild, Carl T.
APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham I
TITLE OF INVENTION: Assay for
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
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SOFTWARE: PatentIn version 3.0
Q ID NO 41
LENGTH: 46
                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                          LENGTH: 56
TYPE: PRT
ORGANISM: Human immunodeficiency virus type 1
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                                                                                                                                                              YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 51
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35; Conser
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2001-08-17
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97.2%;
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97.2%;
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for Detection of Viral Fusion Inhibitors
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Pred. No. 3.3e-16;
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Pred. No. 2.7e-16;
0; Mismatches 1
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·US-10-059-271-81
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US-10-059-271-84
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LENGTH: 177
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Best Local S
Matches 35
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Best Local Similarity
Matches 35; Conserv
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SEQ ID NO 84
LENGTH: 221
TYPE: PRT
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                                                                           GENERAL INFORMATION:
                                                                                      Sequence 81, Application US/10059271 Publication No. US20030082208A1
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CURRENT FILING DATE: 2002-07-09
NUMBER OF SEQ ID NOS: 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: REPKE, HEINRICH APPLICANT: BUDDE, ECKHARD APPLICANT: NICOLAUS, STEFAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE TITLE OF INVENTION: BEING IMMOBILIZED FILE REFERENCE: ALBRE-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Polypeptide Inducing Antibodies Neutralizing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: polypeptide derived from gp41 LAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Peptide LOCATION: (1)..(1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                              Local Similarity 97.3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Krell, Tino
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97.28;
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97.2%;
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Pred. No. 1.1e-15;
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Pred. No. 1.4e-15;
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                                                                                                                                                                                                                                                                                                                                                                                            Sequence: Synthetic
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US-09-854-816-1

Patent No. US20020151473A1 GENERAL INFORMATION:

Sequence 1, Application US/09854816

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RESULT 8
US-09-854-816-108
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                                                                                                                                                            Sequence 108, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 97.3
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                   9-854-816-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: CUNknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
 NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: DP178
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Constrained Helical Peptides and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: South San F
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Genentech, Inc.
                                     INVENTION:
SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94080
                                                                     J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                      J. Kevin Judice
Robert S. McDowell
                                                                                                                                             Andrew C. Braisted
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Melissa A. Starovasnik
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Robert S. McDowell
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97.28;
 Constrained Helical Peptides and Methods of Making Same : 113
                                                      Wells
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                                                                                                                                                                                                                                                                                                                                                                         Score 190; DB 10;
Pred. No. 2.1e-16;
                                                                                                                                                                                                                                                                                                                                                                                            Length 36;
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                                                                                      ; OTHER INFORMATION: DP178c peptide US-09-848-616-176
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Query Match
Best Local Similarity 97.2
Matches 35; Conservative
                                                                                                                                                               CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 176
LENGTH: 37
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 176, Application US/09848616
Publication No. US20030054010A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                  APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Lechner, Franziska
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/848,616
                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Sebbel, Peter APPLICANT: Dunant, Nicolas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Torchia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEPAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 108:
SEQUENCE CHARACTERISTICS:
                                                                                                                           FEATURE:
                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 94080
COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE DESCRIPTION: SEQ ID NO: 108:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: Amino Acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 36 amino acids
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                              96.9%;
97.2%;
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97.28;
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                            Pred. No.
                                            Score 190;
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            Mismatches
                        2.le-16;
                                                DB 9;
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                                              Length 37;
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            Indels
          0;
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1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36

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SEQ ID NO 1

NUMBER OF SEQ ID NOS: 5 SOFTWARE: PatentIn version

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-116-797-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide \mathtt{US}\text{-}09\text{-}493\text{-}346\text{-}1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-09-493-346-1
                                                   ; NAME/KEY: PEPTIDE
LOCATION: (1)..(36)
; OTHER IMPORMATION: T-20
US-09-796-202-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 96.9
Best Local Similarity 97.2
Matches 35; Conservative
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CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 1
                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version 3.0
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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Best Local Similarity
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                        Patent No. US20020068813A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Olson, William C
APPLICANT: Maddon, Paul J
TITLE OF INVENTION: Compositions and Methods
TITLE OF INVENTION: Infection
FILE REFERENCE: 61009
                                                                                                                                                                                                                                                                         APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SCLFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 equence 1, Application US/09493346
blication No. US20030082185A1
ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        equence 10,
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TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                           )FT 4
)9-796-202-10
                                                                                                                                        ORGANISM: unknown
                                                                                                                                                           TYPE: PRT
                                                                                                                      FEATURE:
                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
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97.2%;
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96.9%;
97.2%;
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Pred. No. 2.1e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 190; DB 9;
Pred. No. 2.1e-16;
Score 190; DB 10; Pred. No. 2.1e-16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-779-451-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-834-628-1
Ър
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Best Local Similarity
Matches 35; Conserv
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                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09834628 Patent No. US20020119922A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                        Matches
                                                                                                                                                                                                                                                                                                                 CURKENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
NUMBER OF SEQ ID NOS: 13
SOFTWARE: 0=+----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Wild, Carl T.
APPLICANT: Mildway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: YU, YEON GYU
APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/181,543 PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: PEPTIDES FOR INHIBITION OF HIV INFECTION FILE REFERENCE: 05823.0198-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 36
TYPE: PRT
                                                                                                                                                              OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                           LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                 1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                       Similarity
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                                                                                         Pred.
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Pred. No. 2.1e-16;
                                                                                                         Score 190;
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                                                                      Mismatches
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                                                                                  2.1e-16;
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Result
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Listing first 45 summaries
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             362588 seqs, 96450795 residues
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//cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
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//cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
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//cgn2_6/ptodata/1/pubpaa/US00_NEW_PUB.pep:*
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          DB
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     0 US-09-796-202-10
0 US-09-784-628-1
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10 US-09-84-816-1
10 US-09-84-816-1
10 US-09-84-816-1
10 US-09-84-616-1
10 US-09-779-451-4
11 US-10-040-349B-2
11 US-10-059-271-81
11 US-10-059-271-81
12 US-10-059-271-87
13 US-10-059-271-97
14 US-10-059-271-97
15 US-09-854-816-16
16 US-09-854-816-16
17 US-09-854-816-18
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US-10-116-797-1
US-09-493-346-1
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Sequence 2, Appli
Sequence 84, Appl
Sequence 81, Appl
Sequence 82, Appl
Sequence 97, Appl
Sequence 16, Appl
Sequence 17, Appl
Sequence 17, Appl
                                                                                                                                                                              Sequence 10, Appl
Sequence 5, Appli
Sequence 1, Appli
Sequence 108, App
Sequence 176, App
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Sequence 2, Appli
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Sequence 1, Appli
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US-09-854-816-6	US-09-854-816-41	US-09-854-816-38	US-09-854-816-109	US-09-476-242-2	US-09-891-609-2	US-09-891-609-4	US-09-854-816-26	US-09-854-816-28	US-09-854-816-13	US-10-059-271-94	US-09-854-816-12	US-09-854-816-9	US-09-854-816-50	US-09-854-816-19	US-09-912-824-1	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242;1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	US-10-040-349B-1
Sequence 6, Appli	41,	٠.	Sequence 109, App	Ņ	Sequence 2, Appli		26,	28,	e 13,	o	12	9, 1	50,	19,	e 1,	55,	Sequence 53, Appl		e 1,	Sequence 33, Appl		93,	Sequence 8, Appli	Sequence 49, Appl	Sequence 1, Appli

ALIGNMENTS

GENERAL INFORMATION:
APPLICANT: Petropoulos, Christos J.
APPLICANT: Parkin, Weil T.
APPLICANT: Whitcomb, Jeanette
APPLICANT: Huang, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE
TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS
FILE REFERENCE: 2793/65166

US-09-874-475-16

Sequence 16, Application US/09874475 Publication No. US20020182592A1

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RESULT 2
US-10-116-797-1
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                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
"hehes 35; Conserve
                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Fusion Inhibitor Peptide US-09-874-475-16
                               GENERAL INFORMATION:
APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING
FILE REFERENCE: 64672-A
                                                                                                                       Sequence 1, Application US/10116797 Publication No. US20030044411A1
                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
CURRENT APPLICATION NUMBER: US/10/116,797 CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
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97.28;
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Pred. No. 2.1e-16;
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В

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US-09-082-279B-497

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US-09-082-279B-498
; Sequence 498, Application US/09082279B
; Patent No. 6258782
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
EQ ID NO 497
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
 В
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                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 498
LENGTH: 36
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                                                                                    Query Match
Best Local Similarity
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                                                                     Matches
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
WITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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                                                                                                                                                                           ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                              TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Guthrie, Kelly
Merutka, Gene
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Merutka, Gene
Anwer, Mohmed
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                                                                    Conservative
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                                                                                    96.9%;
97.2%;
                                                                     0; Mismatches
                                                                                    Score 190; DB 4;
Pred. No. 5.5e-17;
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Pred. No. 5.5e-17;
0; Mismatches 1
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RESULT 15 US-09-082-279B-603

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; OTHER INFORMATION: Core polypeptide
US-09-082-279B-603
                                                         Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                          SOFTWARE: FastSEQ for Windows
SEQ ID NO 603
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 603, Application US/09082279B Patent No. 6258782
                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                                                                                                                                                                                                                                                                     APPLICANT: Lambert Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Merutka, Gene
Anwer, Mohmed
                                                                                                                                                                                                                                           FastSEQ for Windows Version 3.0
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                                                                 Conservative
                                                                                96.9%;
97.2%;
                                                                 0;
                                                                                  Score 190;
Pred. No. 5
                                                                 Mismatches
                                                                                5.5e-17
                                                                                                 DB 4;
                                                                                              Length 36;
                                                                 Indels
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                                                                 Gaps
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Search completed: May 16, 2003, 11:22:13 Job time : 10.1928 secs

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RESULT 10 US-08-554-616-1

Sequence 1 Patent No.

Application US/08554616

GENERAL INFORMATION:

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RESULT 11
US-08-485-264A-1
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                                                                                                                                                                                                                      Sequence 1, Applic Patent No. 6228983
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APPLICANT: Lambert, Dennis M.
APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF
TITLE OF INVENTION: MEMBRANE FUSION ASSOCIATED EVENTS, INCLUDING
TITLE OF INVENTION: RESPIRATORY SYNCYTIAL VIRUS TRANSMISSION
NUMBER OF SEQUENCES: 232
                                                                                                                                                APPLICANT:
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LENGTH: 36 amino acids
TYPE: amino acid
                                                                                                                                                                   APPLICANT:
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CURRENT APPLICATION DATA:
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APPLICANT: Matthews, Thomas J.
APPLICANT: Wild, Carl T.
TITLE OF INVENTION: SYNTHETIC PEI
TITLE OF INVENTION: TRANSMISSION
                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 06 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ZIP: 10036
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STATE: New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
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1155 Avenue of the Americas
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(212) 869-8864/9741
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                                                                                                                                              Matthews, Thomas J. Wild, Carl T.
                                                                                                                             Barney, Shawn O.
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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Pred. No. 5.5e-17;
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; OTHER INFORMATION: Core polypeptide US-09-082-279B-15
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; MOLECULE TYPE: peptide
US-08-485-264A-1
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SEQ ID NO 15
LENGTH: 36
                  Best
                                  Query Match
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Best Local :
   Matches
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APPLICANT:
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                                                                                                                                                                                           CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/082,279B
                                                                                                                                                                                                                                                                               APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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TELEPAX: (212) 869-9741/8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                    FILE REFERENCE:
                                                                                                                TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: COLUZZÍ, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/485,264A FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
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STREET: 110.
STREET: 110.
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OPERATING SYSTEM:
Local Similarity les 35; Conserv
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ZIP: 10036-2711
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Guthrie, Kelly
Merutka, Gene
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Anwer, Mohmed
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   Conservative
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SYSTEM: PC-DOS/MS-DOS
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                  96.9%;
97.2%;
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                  Score 190; DB 4;
Pred. No. 5.5e-17;
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Pred. No. 5.5e-17;
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Gaps
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1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36

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CURRENT APPLICATION DATA:

SOFTWARE:

PatentIn Release #1.0, Version #1.30

ATTORNEY/AGENT INFORMATION:

CLASSIFICATION: APPLICATION NUMBER:

07-JUN-1995

US/08/475,668A

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                                                                                                                                                                                                              COUNTY...
ZIP: 10036-2/1.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: IBM PC compatible
TOWNITER: IBM PC-DOS/MS-DOS
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NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
 NFORMATION FOR SEQ
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                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,551A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
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MOLECULE TYPE:
                                                                                                                            CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
TITLE OF INVENTION:
                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
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                                                                                                                                                                                                            COMPUTER: IBM PC
OPERATING SYSTEM:
SOFTWARE: Patent/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
nes 35; Conserv
                                                                                  NAME: CORUZZI, Laura A. REGISTRATION NUMBER: 30, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                       CITY: New York
STATE: New York
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66141 PENNIE
FOR SEQ ID NO:
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Barney, Shawn O.
Lambert, Dennis M.
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                                 (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Petteway, Stephen R.
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                                                                                                                                                                                                                  PatentIn Release #1.0, Version #1.30
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                                                                                                30,742
                                                                                    7872-023
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Pred. No. 5.5e-17;
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                                                                                                                            US-08-471-913A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 96.9
Best Local Similarity 97.3
Matches 35; Conservative
                                                              Matches
                                                                                           Query Match
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                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT:
                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS: LENGTH: 36 amino acids
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SOFTWARE: PatentIn Rel
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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ZIP: 10036-2711
                                                              Local Similarity les 35; Conser
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              1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Langlois, Alphonse
                                                            Conservative
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Release #1.0, Version #1.30
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                                                                            Score 190; DB 3; Pred. No. 5.5e-17;
                                                          Mismatches
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Best Local Similarity 97.4
35; Conservative
                                                                                                    Sequence 1, Application Patent No. 6054265
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                                                                                          GENERAL
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TOPOLOGY: unl
MOLECULE TYPE:
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TITLE OF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: CORUZZÍ, Laura A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78 TELECOMMUNICATION INFORMATION:
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
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MEDIUM TYPE: Floppy disk
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                          INFORMATION:
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Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
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Lambert, Dennis M.
Lambert, Dennis M.
Petteway, Stephen
                                Barney, Shawn O.
                                             Wild, Carl T.
                                                           Matthews, Thomas J
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                                                                                                                                                                                                                                                                    96.98;
97.28;
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Pred. No. 5.5e-17;
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APPLICANT: Lambert,
APPLICANT: Lembert,
APPLICANT: Petteway,
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                          Sequence
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Best Local Similarity
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ZIP: 10036-2/11
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
PC-DOS/MS-DOS
PC-DOS/MS-DOS
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PC-DOS/MS-DOS
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
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                               ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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ATTORNEY/AGENT INFORMATION:
NAME: COIUZZI, Laura A.
                                                                                                                                                                       NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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LENGTH: 36 amino acids
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SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
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                                                                                                       CITY: New York
STATE: New Yor
COMPUTER: IBM PC
OPERATING SYSTEM:
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                                                                                  COUNTRY:
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(212) 869-9741/8864
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                   IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unknown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96.98;
97.28;
 PC-DOS/MS-DOS
                                                                                                                                                                                                                          COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING INFI
                                                                                                                                                                                                          TRANSMISSION
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                                                                                                                                                         Edmonds LLP
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of the Americas
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Pred. No. 5.5e-17;
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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                                                                                                                                 Sequence 1, Application US/09071877 Patent No. 6015881
                                                                                                                                                                                                                                                                                                      Matches
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Best Local Similarity
                                                                             HENERAL INFORMATION:
APPLICANT: Kang, Myung-Chol
APPLICANT: Bray, Brian
                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: unknown MOLECULE TYPE: peptide 08-486-099-1
       APPLICANT: METUTA, Gene
                                               APPLICANT:
                                                               APPLICANT:
FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION TITLE OF INVENTION: MEMBRANE FUSION-ASSOCIATED | B VIRUS TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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STATE: New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/486,099 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
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Mader, Catherine
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Langlois, Alphonse J
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7872-050
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Pred. No. 5.5e-17;
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RESULT 4
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                                                               US-08-360-107A-1
Matches
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               Best Local Similarity
                            Query Match
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CURRENT FILING DATE: 1998-05-01
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 1:
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TYPE: PRT
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                           MOLECULE TYPE:
                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                      TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Petteway, Stephen R. APPLICANT: Langlois, Alphonse Carrille OF INVENTION: METHODS AND
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TELEFAX: 66141 PENNIE
TELEX: 66141 PENNIE
                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                     NAME: Coruzzi, Laura A REGISTRATION NUMBER: 30
                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/0 FILING DATE: 20-DEC-1994
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Barney, Shawn O.
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Avenue of the Americas
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             96.9%;
97.2%;
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97.2%;
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Pred. No. 5.5e-17;
0; Mismatches 1
             Score 190; DB 3; Pred. No. 5.5e-17;
Mismatches
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US-08-485-264A-1
US-08-485-264A-1
US-08-485-264A-1
US-08-682-279B-498
US-09-082-279B-603
US-09-082-279B-631
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96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	.96.9		96.9
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US-09-082-279B-771	US-08-255-208A-1	US-09-315-304B-1511	US-09-315-304B-1486	US-09-315-304B-1470	US-09-315-304B-1469	US-09-315-304B-1161	US-09-315-304B-1121	US-09-315-304B-1076	315	US-09-315-304B-705	US-09-315-304B-631	US-09-315-304B-630	US-09-315-304B-603	US-09-315-304B-498	US-09-315-304B-497	US-09-315-304B-15	US-08-474-349A-413
Sequence 771, App	Sequence 1, Appli	Sequence 1511, Ap	Sequence 1486, Ap	Sequence 1470, Ap	Sequence 1469, Ap	Sequence 1161, Ap			Sequence 834, App		•	Sequence 630, App	`	Sequence 498, App	ς-	ъ	Sequence 413, App

ALIGNMENTS

; MOLECULE TYPE: peptide US-08-073-028-1 RESULT 1 US-08-073-028-1 Sequence 1, Application US/08073028 Patent No. 5464933 GENERAL INFORMATION: Matches Query Match Best Local TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: APPLICANT: APPLICANT: REFERENCE/DOCKET NUMBER: 78 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090 ATTORNEY/AGENT INFORMATION: NAME: COTUZZI, Laura A. REGISTRATION NUMBER: 30,742 SEQUENCE CHARACTERISTICS: LENGTH: 36 amino acids CURRENT APPLICATION DATA: COMPUTER READABLE FORM: NUMBER OF SEQUENCES: 7 CORRESPONDENCE ADDRESS: TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV TITLE OF INVENTION: TRANSMISSION STREET: 1155 Av CITY: New York STATE: New York COUNTRY: ZIP: 100 TELEPHONE: (212) /20 TELEPHANE: (212) 869-8864/9741 APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1993 CLASSIFICATION: 514 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0 TOPOLOGY: TYPE: amino acid STRANDEDNESS: si Local Similarity es 35; Conserv MEDIUM TYPE: ADDRESSEE: USA 10036 New York 1155 Avenue of the Americas Matthews, Thomas Wild, Carl T. Conservative Bolognesi, unknown PatentIn Release #1.0, Version #1.25 Pennie & Edmonds Floppy disk single 96.9%; 97.2%; US/08/073,028 Dani P. Score 190; DE Pred. No. 5.5e 0; Mismatches 0, 7872-004-999 DB 1; .5e-17; Length 36; 0, Gaps

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1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36

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RESULT 15
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Search completed: May 16, 2003, 11:19:49 time: 27.3124 secs
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Best Local Similarity 94.4
Matches 34; Conservative
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078705; O1-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLEL. 19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=11676;
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EMBL; D86068; BAA12995.1; -
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; GJycoprotein; Polyprotein;
AIDS; Coat protein; GJycoprotein; Polyprotein;
SEQUENCE 856 AA; 97287 MW; 238042A234C5668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cayabyab M., Karlsson G.B., Etemad-Moghadam B. Halloran M., Axthelm M.W., Letvin N.L., Sodros Submitted (JAN-1998) to the EMBL/GenBank/DDBJ EMBL; AF041850; AAD12142.1; -. InterPro; IPR000328; Env_GP41. InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human immunodeficiency Viruses; Retroid viruse Viruses; Retroid viruse V
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                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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"Spectrum of Biological Properties
(HIV-1) Isolates."
Virology 174:103-116(1990).
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 673
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NCE 856 AA; 97151 MW; C50BE0388FB73659
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viruses; Retroviridae;
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                                                                          Score 190; DE
Pred. No. 1.2e
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RESULT Q74090

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OS Huma
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090178;
01-NOV-1998
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    AIDS; Coa
SEQUENCE
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                     InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
                                                                                                                                                                     Fang H., Pincus S.H.;
"Spontaneous activation of human immunodeficiency virus immunotoxin-resistant variant T cell line.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q74090
Q74090;
                                                                                                                                                         immunotoxin-resistant variant T cell line.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE=95074930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
                                                                                                                                         EMBL; AF070521; AAC28452.1;
                                                                                                                                                                                                                                                          SEQUENCE
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"Spectrum of Biological Properties
(HIV-1) Isolates.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=PM213;
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NCBI_TaxID=11676;
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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NCE 856 AA; 97396 MW; FE3
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    protein;
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    Glycoprotein;
96885 MW; 080
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Submitted (JUL-1989)
                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                         molecular clone.";
J. Virol. 59:284-291(1986).
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                                                                                                                                                                                                                                                                                                                                                                                       Viruses; Retroid viruses; NCBI_TaxID=11676;
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                                                                                                                                                       MEDLINE=92219406; PubMed=1373204; Dai L.C., Littaua R., Takahashi K.,
                                                                                                                                                                                                                                                                                                           "Production of acquired retrovirus in human and
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                                                                                                 J. Virol. 66:3151-3154(1992).
EMBL; M19921; AAA44992.1; -.
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InterPro; IPR000777; GP120.
                                                                                                                                              Mutation
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                                                                                                                        ymphocytes."
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Hum. Retroviruses 10:1143-1155(1994).
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L-1989) to the EMBL/G
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man H.E., Koenig
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                                Glycoprotein; Polyprotein; Transme 97124 MW; ABA0A1BF36D5595A CRC64;
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nonhuman cells tr
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          Length 854;
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01-NOV-1996 (TIEMBLIEL. (
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092877;
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CONFLICT
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Viruses; Retroid viruses;
NCBI_TaxID=11676;
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                                                                                                                                                                                                                                                                                     Pfam; PF00516; GP120; Pfam; PF00517; GP41;
                                                                                                                                                                                                                                                                                                                                           retrovirus in human and molecular clone.";
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                                   Simian-Human immunodeficiency virus. Viruses; Retroid viruses; Retroviridae;
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SEQUENCE FROM N.A. MEDLINE=99098984;
                          NCBI_TaxID=57667;
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Q70608;
01-NOV-1996
                                                                                                         Pfam;
                                                                                                                                                                                            MEDLINE=95127297; PubMed=7826699; Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B., Reitz M., Hall L., Robert-Guroff M., Gallo R., Blattner W.; Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.; "Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB)."; ALIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 752
752
SEQUENCE 752 AA; 84894 MW; 8B30AE894013B45A CRC64;
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SEQUENCE
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W "Viral variability and serum antibody response in a laborat infected with HIV type 1 (HTLV type IIIB).";
ALDS Res. Hum. Retroviruses 10:1143-1155(1994).
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                                                                                                                                                        Mulder K.E.;
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InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mulder K.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-LW852;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                   STRAIN-LW87-2;
                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                             Coat protein; Glycoprotein; Polyprotein; Transmembrane. ER 752 752
                                                                                               PF00517; GP41; 1.
                                                                                                         PF00516; GP120; 1.
                              l Similarity
35; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (JUL-1994) to the EMBL/GenBank/DDBJ databases
                                                                    752 AA;
                                                                                                                                                                                                                                                                                                                              (TIEMBLIEL 01, Created)
(TIEMBLIEL 01, Last sequence update)
(TIEMBLIEL 19, Last annotation update)
                              Conservative
                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
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                                                                                                                                                                                                                                                                                            viruses;
                                                                    84780 MW;
                                      96.98;
97.28;
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                                                                                                                                                                                                                                                                                           Retroviridae;
                              0;
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                                               Score 190;
                                       Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 190; DB 19
Pred. No. 1e-14;
                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                   708672A2D0C0E8F8
                              Mismatches
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                                       No.
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                                     1e-14;
                                                                                                                                                                                                                                                                                           Lentivirus
                                                DB 15;
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                              1;
                                                                    CRC64;
                                               Length
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Q89797;
Q1-NOV-1996
Q1-NOV-1996
Q1-OCT-2001
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Q78243;
Q1-NOV-1996
                                                                                                       Envelope
                                                                                                                                                                                                                                                                                 SEQUENCE
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01-DEC-2001
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SEQUENCE FROM N.A.
STRAIN=LW90-2;
MEDLINE=95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberg
Shaw G., Kong L., Weiss S., Waters D., Gallo R.
"Viral variability and serum antibody response
                                                                                                                                         Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
CCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00516; GP120; Pfam; PF00517; GP41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Biological and molecular characterization of producer and producer clones from HUT-78 infected with a patient HIV iso AIDS Res. Hum. Retroviruses 5:385-396(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Sequence analysis of HIV-1 proviral chronically infected HUT-78 cellular J. Viral Diseases 1:40-55(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Carlini F., Federic M.
Verani P., Rossi G.B.;
                                                                                                                           NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Int. J. Immunopharmacol. 3:17-23(1990). 
EMBL; Z11530; CAA77628.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       productive clone.",
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Borsetti A., Saggio I., Verani P., Rossi G.; "Variability of HIV-1 virus: characteristics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Titti F., Federico M., Butto S., Orecchia A., Borsetti A., Saggio I., Verani P., Rossi G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Federico M., Titti F., Butto S., Orecchia A. Macchi B., Mangiano N., Verani P., Rossi G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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851 AA;
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                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              96.9%;
97.2%;
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Last annotation
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Pred. No. 1.2e-14;
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                                    Lautenberger J., Hahn
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                     Gallo R.,
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   laboratory worker
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RESULT
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   RESULT 3
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Best Local S
Matches 35
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01-NOV-1996
01-DEC-2001
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EMBL; U12034; AAA76669.1; -

InterPro; IPR0003328; Env_GP41.

InterPro; IPR000777; GP120.

Pfam; PF00516; GP120; 1.

Pfam; PF00517; GP41; 1.

AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.

NON_TER 747
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747
SEQUENCE 747 AA; 84250 MW; 732E836A52245F14 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q70606 PRELIMINARY; PRT. Q70606; Q70606; Q1. Creats Q1. NOV-1996 (TrEMBLrel. Q1, Last; Q1. DEC-2001 (TrEMBLrel. 19, Last; Q1. DEC-2001 (TrEMBLrel. Q2. DEC-2001) (TremBLrel. 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-95127297; PubMed-7826699;

MEDLINE-95127297; PubMed-7826699;

Reitz M., Hall L., Robert-Guroff M., Lautenberger

Shaw G., Kong L., Weiss S., Wester D., Gallo R., E

"Viral variability and serum antibody response in

infected with HIV type 1 (HTLV type IIIB).";

AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Viruses; Retroid viruses; Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Envelope glycoprotein (Fragment).
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                                                                                                                                                                                                                      MEDLINE-95127297; PubMed-7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.;
"Viral variability and serum antibody response in a laborator
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
Submitted (JUL-1994) to t
EMBL; U12032; AAA76668.1;
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NCBI_TaxID=11676;
                                                                       Mulder K.E.;
                                                                                                               STRAIN-LW881;
                                                                                                                                                      SEQUENCE FROM
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35; Conser
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97.2%;
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01, Last sequence update)
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                                   the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 190;
Pred. No. 1
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Trivelope glycoprotein (f
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01-NOV-1996 (TrEMBLrel. 0
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InterPro; IPR000777; GP120:
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein;
NON_TER 748 748
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Shaw G., Kong L., Weiss S., Waters D., Gallo R., E
"Viral variability and serum antibody response in
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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SEQUENCE
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InterPro; IPR000777; GP120.
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J.,
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          Human immunodeficiency virus type Viruses; Retroid viruses; Retrovir
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Viruses; Retroid viruses; NCBI_TaxID=11676;
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PF00517; GP41; 1
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(TrEMBLrel. 19, Last annotation updat
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: sp_archea:*
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3: sp_fungi:*
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Gapop 10.0 , Gapext 0.5
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1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
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sp_bacteria:*
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SUMMARIES

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ALIGNMENTS

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993A6; 993A6; 993A6; 1-JUN-2001 (TrEMBLrel. 17, Created) 1-JUN-2001 (TrEMBLrel. 19, Last sequence update) 1-JUN-2001 (TrEMBLrel. 19, Last sequence) 1-JUN-2001 (TrEMBLrel. 19, La	Qy Db	ME QL	SQ	K D R	DR DR	R R R	Ŗ Ŗ	RA	RAX	RC RP	ROC	88	GN	D D D	RESU Q993
•	YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF	96.9%; Score 190; DB 15; Length 645; Similarity 97.2%; Pred. No. 8.8e-15; 5; Conservative 0; Mismatches 1; Indels 0;	orane. 1 1 645 AA; 72485 MW; B076514BE93362EC	517; GP41; protein;	InterPro; IPR000328; Env_GP41. InterPro; IPR000777; GP120. Pfam: PF00516; GP120: 1		influences	tspots to exposed strands	nes в., Riberdy	SEQUENCE FROM N.A. STRAIN=1007;	NCBI_TaxID=11676;	Human immunodeficiency virus type 1.	Truncated envelope glycoprotein (Fragment). ENV.	2001 (TrEMBLrel. 17, 2001 (TrEMBLrel. 17, 2001 (TrEMBLrel. 19,	1 993A6 PRELIMINARY; PRT; 645 993A6:

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PIR; D26192; VCLJZR.
HIV; K03458; ENV$Z6.
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InterPro; IPR000777; GP120.
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NCBI_TaxID=11694;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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polyprotein GP160 precursor [Contains: Exterior membrane
tein (GP120); Transmembrane glycoprotein (GP41)].
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email to license@isb-sib.ch).
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Submitted (NOV-1988) to the HIV data bank.
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InterPro; IPR000777; GP120.
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Viruses; Retroid viruses;
NCBI_TaxID=11683;
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glycoprotein (GP120);
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Srinivasan A., Anand R., York D., Rangan Schochetman G., Curran J., Kalyanaraman
                                                                                                                                                                                      Human immunodeficiency
Viruses; Retroid viruse
NCBI_TaxID=11708;
 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
                                                   Zaire: nucleotide sequence analysis identifies domains in the envelope gene.";
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: 91ycoprotein (GP120); Transmembrane glycoproteir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type 1 (PV22 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=11700;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN the European Bioinformatics Institute. There are no restr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE-85111157; Pumuesing M.A., Smith
                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AIDS;
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InterPro; IPR000777; GP120.
Pfam; PF005516; GP120; 1.
Pfam; PF00517; GP41; 1.
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EMBL; X01762; CAA25903.1;
PIR; A03974; VCLJVL.
HIV; K02083; ENV$PV22.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               use by non-profit institutions as long modified and this statement is not removed.
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SEQUENCE FROM N.A.
MEDLINE-90317906; PubMed-2370688;
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Viruses; Retroid viruse
NCBI_TaxID=11690;
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991 (Rel. 17, Last sequence update)
991 (Rel. 40, Last annotation update)
001 (Rel. 40, Last annotation update)
polyprotein GP160 precursor [Contains: E
                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                virus type 1 (SF33 isolate) (HIV-1).
es; Retroviridae; Lentivirus.
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      er D., Levy J.,
cellular host
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                   J.A.,
                                                                                                                                             Exterior membrane n (GP41)].
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EMBL; M38427; AAA45067.1;
HIY; M38427; ENVSSF33.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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Signal. 1
SIGNAL 1
CHAIN 32 50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              replication, and cytopathicit the viral genome.",
J. Virol. 64:4016-4020(1990).
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33; Conserv
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RESULT 8
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Best Local S
Matches 34
                                                                                                                                                                                     PIR; A24774; VCLUSM.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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P31872;
01-JUL-1993
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01-JUL-1993 (Rel. 26, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Fig. 18, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP41)].
                                                                                                                                                                                                                                                                                               MEDLINE=86218077; PubMed=2423250;
Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D.,
Parks E.S., Parks W.P., Josephs S.F., Gallo R.C.,
"Identification and characterization of conserved
"regions in the envelope gene of HTLV-III/LAV, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
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                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE=86218077; Starcich B.R., Hah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                      Viruses; Retroid viruses; NCBI_TaxID=31678;
                                                                                                                                                                                                                                                                                                                                                                                iuman immunodeficiency virus type 1 (WMJ1 isolate) (HIV-1).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            636
                                                                                                                                                                                                                                      MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A WAS PERIMATALLY INFECTED BY HER MOTHER.; A24774; VCLJ3W.
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94.4%;
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TWO-YEAR
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HIV; M17450; ENV$SC.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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_HV1SC
_P05878;
01-NOV-1988
01-NOV-1988
15-JUL-1999
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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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                                                                                                                                                                                                      SEQUENCE FROM N.A.

MEDLINE=88219542; PubMed=3369091;

Gurgo C., Guo H.-G., Franchini G., Aldovini A., Col

Farrell K., Wong-Staal F., Gallo R.C., Reitz M.S.,

"Envelope sequences of two new United States HIV-1

"Envelope sequences of two new United States HIV-1

Virology 164:531-536(1988).
                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1 Viruses; Retroid viruses; Retrovirio NCBI_TaxID=11702;
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EMBL; A04321; CAA00352.1;
PIR; A03975; VCLJLV.
HIV; K02013; ENV$BRU.
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"Nucleotide sequence of the AIDS virus,
Cell 40:9-17(1985).
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MEDLINE=85099333; Sonigo P., Danos
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T 01-FEB-1991 (Rel. 17, Created)

T 01-FEB-1991 (Rel. 17, Last sequence update)

T 15-JUL-1999 (Rel. 38, Last annotation update)

DE Envelope polyprotein GP160 precursor [Contains: Extance of the contains of t
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J. Virol. 64:3792-3803(1990).
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: glycoprotein (GP120); Transmembrane glycoproteir
EMBL; U12055; AAA76690.1; -. GlycoSuiteDB; Q70626; -. InterPro; IPR000328; Env_GP4:
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                                                                                           Reitz M.S. Jr., Hall L., Robert-Guroff M., Lauto
Shaw G.M., Kong L.I., Weiss S.H., Watters D., Ga.
"Viral variability and serum antibody response infected with HIV type 1 (HTLV type IIIB).",
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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NCBI_TaxID=82834;
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                             s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way iffied and this statement is not removed. Usage by and for commercial ities requires a license agreement (See http://www.isb-sib.ch/announce/send an email to license@isb-sib.ch).
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Retroviridae; Lentivirus.
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RESULT 6
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STANDARD; PRT; 861 AA.
AC P03377;
DT 21-TUL-1986 (Rel. 01, Created)
DT 21-TUL-1986 (Rel. 01, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE Envelope polyprotein GP160 precursor (Contains: Ext
Envelope polyprotein (GP120); Transmembrane glycoprotein (G
GN Env
OS Human immunodeficiency virus type 1 (BRU isolate) (
Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCBL_TaxID=11686;
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Human immunodeficiency virus type 1 (BRU isolate) Viruses; Retroid viruses; Retroviridae; Lentivirus

glycoprotein

Exterior on (GP41)).

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15-JUL-1999 (Rel. 05, C

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Envelope polyprotein Gp

glycoprotein (GP120); Ti
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InterPro; IPR000777; GP120
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprote
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EMBL; AF03839; AAB99976.1;
EMBL; AF033819; AAC82596.1;
HIV; K03455; ENV$HXB2.
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Submitted (APR-1997) to the EMBL/GenBank/DDBJ databases.
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"Complete nucleotide sequences of
virus.";
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MEDLINE-87299196; PubMed-3040055;
Ratner L., Fisher A., Jagodzinski
Gallo R.C., Wong-Staal F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               between
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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annotation update)
precursor [Contains: Exterior membrane
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DENV_HVH3

C P04624;

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T 13-AUG-1987 (Rel. 05, Created)

DT 01-FEB-1996 (Rel. 33, Last sequence update)

DT 15-JUL-1999 (Rel. 33, Last annotation update)

Envelope polyprotein GP160 precursor [Contains: Extended to the contains of the 
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                                                                                                                                                                                                                         Pfam; PF00516; GP120;
Pfam; PF00517; GP41;
AIDS; Coat protein; P
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Viruses; Retroid viruses; Retroviridae; Lentivirus
NCBI_TaxID=11707;
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                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type 1 (BH10 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID-11678;
                                                                potential glycosylation sites of the type 1 immunodeficiency virus envelope glycoprotein chinese hameter overv cells.":
                                                                                                                      MEDLINE=90285159; PubMed=2355006;
Leonard C.K., Spellman M.W., Ridd
Gregory T.J.;
                                                                                                                                                                                             Lautenberger J.A., Papas
Wong-Staal F.;
"Complete nucleotide sequ
Nature 313:277-284(1985).
                                                                                                                                                                                                                                   MEDLINE=85111123; PubMed=2578615;
Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A., Baumelster K., Tvanoff L., Petteway S.R. Jr., Pearson M.L. Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gal
                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A MEDLINE=85111123;
                                                                                       "Assignment of intrachain disulfide bonds and characterization potential glycosylation sites of the type 1 recombinant human
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 SWISS-PROT entry is copyright. It is produced entry the Swiss Institute of Bioinformatics and
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35; Conservative
                                                            hamster
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Chem. 265:10373-10382(1990)
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Pfam; PF00517; GP41; 1.
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ENV_HV2G1	ENV_HV2D1	ENV_SIVA1	ENV_HV2RO	ENV_SIVML	ENV_SIVSP	ENV_HV2CA	ENV_HV2D2	ENV_HV2KR	ENV_SIVM1	ENV_SIVMK	ENV_HV2BE
human immun	human immun	simian immu	human immun	simian immu	simian immu	human immun	human immun	human immun	simian immu	simian immu	human immun
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N-LINKED (GLUAGE) (POTENTIAL).	N-I TUKED COLONAC	ВУ	BY S	D !	R.Y	Вγ	ВУ	ВУ	ВҮ	101	DA CIMIL PLINA	TONICATION OF CIVI	EXTERIOR MEMBRANE GLYCOPROTEIN		h	Polyprotein: Glycoprotein: Transmembrane:	•		P120.	nv_GP41.			.1;		license@isb-sib.ch).	See http://ww		long as its content is in no	Institute. There as	forma	SWISS-PROT entry is copyright. It is produced through a collaboration	· • • • • • • • • • • • • • • • • • • •	sequence of the Albs Virus, Hitv-III.";	of the same will the	Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gailo R.C.,	., Pearson M.L.,	N., Kararski J.A., Willefildin B.A.,	Patarca K., Liva					es; Retrovitidae; Lentivirus.	us суре I (вна	time 1 (pine ignlate)	iranamemarane Arleofrocern (orar);	emembrane Octoberd	annotation (Contains: Exterior		Created)		(U) PRI; OSL AA.	3

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RESULT 12
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C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 15-Jul-1995 #sequence_revision 01-Sep-1995 #text_change
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A; Residues: 1-853 <THE>
A; Cross-references: EMBL: M22639;
C; Superfamily: type E retrovirus
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R; Theodore, T.; Buckler-White,
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                                                                                                                                                                       N;Alternate names: coat polyprotein
C;Specles: human immunodeficiency virus Zr-6
C;Date: 30-Sep-1987 #sequence_revision 30-Sep
C;Accession: D26192
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cession: S54384
tatus: preliminary
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Pred. No. 4.8e-14;
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Pred. No. 1.3e-13;
1; Mismatches 2;
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Pred. No. 1
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                                                                                                                    Mismatches
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                                                                                                                                               DB 1;
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C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; qlycoprotein; immunodeficiency; polyp
C;Keywords: AIDS; capsid protein; coat protein; fly200 (fragment) #status predicted <GPl>
F;1-253/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;254-445/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;426-445/Domain: transmembrane #status predicted <TMN>
F;9,23,42,48,78,85,101,107,131,137,143,147,152,155,190,205,353,358,367,379/Binding si
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A;Title: Evolution of human immunodefictency virus type 1 nucleotide sequence diversi A;Reference number: A41621; MUID:92107924; PMID:1763038
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C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 24-Nov-1999
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R; Pang, S.; Vinters, H.V.;
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A; Residues: 1-847 < PAN>
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A;Status: preliminary; translated from GB/EMBL/DDBJ
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    Вр
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        629
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                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                 1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                               env
TSEITTLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                  l Similarity
33; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T09448
                                                                                                                                                                                                                                                                                                                                type E retrovirus
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                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL: U63632;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90.3%;
88.9%;
                                                                                                                                                                                                                 90.3%;
91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Library, July 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Akashi, T.; O'Brien, W.A.;
                                                                                                                                                                                                             Score 177; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω.
                                                                                                                                                                                                                                                                                                                                        env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                            NID:g1465777; PID:g1465781
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Pred. No. 1.4e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                 DB 2;
.9e-13;
            664
                                                                                         36
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                                                                                                                                                                                                                                                   Length 847;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen, I.S.;
                                                                                                                                                                               Indels
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Search completed: May 16, 2003, 11:25:11 Job time: 13.1446 secs

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C;Species: human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
A;Variety: isolate 28
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000 C;Accession: S21998; S70425
R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; Hacke, W. submitted to the EMBL Data Library, July 1991
A;Description: Distinct populations of HIV-1 in blood and cerebrospinal five A;Reference number: S21990
A;Accession: S21998
A;Molecule ****
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Accession. CARA A;Molecule type: DNA A;Cross-references: EMBD:X61355; NID:g60179; PIDN:CAA43622.1; A;Cross-references: EMBD:X61355; NID:g60179; PIDN:CAA43622.1; A;Cross-reference: EMBD:X61355; NID:g60179; PIDN:CAA43622.1; A;Cross-reference: Molecule type: DNA A;Molecule type: DNA
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F:30-861/Product: env polyprotein #status predicted <EPP>
F:87,129,135,140,143,159,163,187,198,234,241,262,276,295,301,302,333,340,356,362,386,396
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Virology
A; Title:
A; Accession: S2199
A; Molecule type: 1
A; Residues: 1-358
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A; Residues: 1-140, 'X', 142-312, 'X', 314-357 <STE2>
A; Residues: 1-140, 'X', 142-312, 'X', 314-357 <STE2>
Iperfamily: type E retrovirus env polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             envelope protein gpl20/gp41 - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 27B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: A28922;
A; Accession: B28922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Description: Distinct populations of HIV-1 in blood and cerebrospinal fluid A; Reference number: S21990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data Library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Steuler, H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Gene: env
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A; Residues: 1-861 <GUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Envelope sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YTTLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF
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, 531-536, 1988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                anct populations of \bar{\text{HIV-1}} in blood and cerebrospinal fluid $21990
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91.7%;
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Pred. No. 3.6e-14;
2; Mismatches 1
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Pred. No. 4.3e-14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 357;
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A; Molecule type: DNA
A; Residues: 1-357 <ST3>
A; Cross-references: EMBL:X61356; NID:g60181; PIDN:CAA43624.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R:Muesing, M.A.; Smith, D.H.; Cabradilla, C.D.; Benton, Nature 313, 450-458, 1985
A;Title: Nucleic acid structure and expression of the ha;Reference number: A93355; MUID:85111157; PMID:2982104
A;Accession: A03974
A; Experimental source: patient 27L A; Note: submitted to the EMBL Data Library,
                                                                                                                                        A;Status: preliminary
                                                                                                                                                              A; Reference number: $70417; A; Accession: $70422
                                                                                                                                                                                           A; Title: Distinct populations of human immunodeficiency A; Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                 R;Steuler, H.;
AIDS Res. Hum.
                                                                                                                                                                                                                                                                                                 C; Accession:
                                                                                                                                                                                                                                                                                                                          envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patient 27L) C;Species: human immunodeficiency virus type 1, HIV-1 C;Datc: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;512-856/Product: transmembrane glycoprotein #status predicted <TMM>F;88,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,F;611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status predicted F;611,616,625,637,674,750,816/Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;1-30/Domain: signal sequence #status predicted <SIG>
F;31-511/Product: exterior membrane glycoprotein #status predicted <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; polyp C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Gene: env
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Cross-references: GB: K02083; NID: g555008; PIDN: AAB59873.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VCLJVL
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A; Cross-references: EMBL: X61359; NID: 960182; C; Superfamily: type E retrovirus env polyprot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Species: human immunodeficiency virus type 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N; Alternate names:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   env polyprotein precursor - human immunodeficiency virus type 1 (isolate LV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: A; Accession: $70425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Residues: 1-222, 'X', 224-358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
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Best Local '
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         preliminary
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: 1-856 <MUE>
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33; Conser
                                                                                                                                                                                                                                                                                                       S70422; S21996
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33; Conservative
                                                                                                                                                                                                                                                 Storch-Hagenlocher, B.; Wildemann, Retroviruses 8, 53-59, 1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92.3%;
94.3%;
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91.7%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              672
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.env polyprotein pre
N;Alternate names:
C;Species: human im
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Title: Nucleotide sequence of the AIDS virus, A;Reference number: A90866; MUID:85099333; PMID A;Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R; Wain-Hobson, S.; S
Cell 40, 9-17, 1985
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N; Alternate names: coat polyprotein C; Species: human immunodeficiency virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R; Ratner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Note: host Homo sapiens (man)
C; Date: 17-May-1985 #sequence_revision
env polyprotein P
N;Alternate names:
                                  C41621
                                                                                                      B
                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                        C;Superfamily: type E retrovirus env polyprotein
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency;
F;1-30/Domain: signal sequence #status.predicted <SIG>
F;1-516/Product: exterior membrane glycoprotein #status predicted <EXT>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Accession: A03975
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
                                                    RESULT
                                                                                                                                                                     Query Match
Best Local S
Matches 35
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                                                                                                                                                                                                                                         ;517-861/Product: transmembrane glycoprotein #status predicted <TMM>;88,136,141,146,161,165,191,202,239,246,267,281,294,300,306,337,344,361,391,397,402,616,621,630,642,679,755,821/Binding site: carbohydrate (Asn) (covalent) #status pre
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sidues: 1-861 <WAI>
oss-references: GB:K02013; NID:g326417; PIDN:AAB59751.1; PID:g326424
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L.; Haseltine, W.; Patarca,
J.A.; Papas, T.S.; Ghrayeb,
                                                                                                      YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                        YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF
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35; Conserv
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es: coat polyprotein
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ilarity 97.2%;
Conservative
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 coat
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                   human
 polyprotein
                                                                                                                                                                                         96.9%;
97.2%;
                 immunodeficiency
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                                                                                                                                                                                       Score 190;
Pred. No. 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunodeficiency virus
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J.; Chang, N.T.;
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PMID:2578615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PMID:2981635
                 virus
                                                                                                                                                                                         DB 1;
.2e-15;
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                                                                                                        678
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                 type
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                                                                                                                                                                                                       Length 861;
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                   <u>س</u>
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Wong-Staal,
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   A; Note: host Homo sapiens (man) C; Date: 31-Dec-1990 #sequence_r C; Accession: B28922
                                                    N;Alternate names: coat polyprotein
C;Species: human immunodeficiency virus type 1,
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                                                                                                        VCLJSC
                                                                                                                          RESULT
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Best Local
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A:Note: host Homo sapiens (man)
C:Date: 11-Feb-1993 #sequence_revision
C:Accession: C41621
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Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Superfamily: type E retrovirus env polyprotein C;Keywords: AlDS; capsid protein; coat protein; glycoprotein; immunodeficiency; F;1-251/Product: coat protein gp100 (fragment) #status predicted <GP1> F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2> F;424-443/Pomain: transmembrane #status predicted <TMN> F;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; A;Note: this virus was isolated from the mother's sexual part C;Genetics: A;Gene: env
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Reference number: A41621; MUID:92107924; PMID:1763038 A;Accession: C41621
                                                                                                                                                                                                                                                                                         F;30-501/Product: coat protein gp120 #status predicted F;502-847/Product: coat protein gp41 #status predicted F;87,134,140,151,155,183,197,234,241,262,276,289,295,33
                                                                                                                                                                                                                                                                                                                                                         C;Keywords: coat protein; glycoprotein; polyprotein; tF;1-29/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                     C;Superfamily: type
C;Keywords: coat pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Cross-references: GB: K03455;
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A; Residues: 1-856 <STA>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Title: Identification and
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Cell 45, 637-648, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N;Contains: coat protein gp120; coat protein gp41
C;Species: human immunodeficiency virus type 1, HIV
C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1988
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otein; glycoprotein; polyprot
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human immunodeficiency virus
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Pred. No. 3.
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Pred. No. 1.5e-14;
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PMID:2423250
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.2e-14;
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  (isolate
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#sequence_revision

31-Dec-1990

#text_change

16-Feb-1997

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seq length: 2000000000
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1: pir1:*
2: pir2:*
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196
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       GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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3 2; Le 9-15; 1;	Is type 1 Type 1, HIV-1 P-Mar-1997 #text_ A.; Zhao, J.Q.; D Ragocytes can be Regular pMID:2172833	1e-15; s 1; 36 668	November 1991 D:960192; PIDN:CAA v polyprotein	< (0	ALIGNMENTS	T01672 BA1621 VCLJBR VCLJH4 JT00266 JT00254 VCLJS1 A44963 S21990 S21997 A53034 S30452 S30452 S30451 B41565
1 854; els	.31-Oct-1997 A.; Idler, K.; Zau Lined by regions of	ls	2	hange 26 [*] Aug-1999		envelope polyprote env polyprotein D env polyprotein - env polyprotein - envelope polyprote env polyprote env polyprotein pr envelope polyprotein pr envelope protein - huma env protein - huma env protein - huma env polyprotein - huma env pol
	Match 96.9%; Score 190; DB 2; Length 854; Local Similarity 97.2%; Pred. No. 8.1e-15; Saps 95; Conservative 0; Mismatches 1; Indels 0; Gaps	ESULT 2 13288 13288 13288 In v protein - human immunodeficiency virus type 1 Species: human immunodeficiency virus type 1, HIV-1 Species: human immunodeficiency virus type 2, Species 1, HIV-1 Species: human immunodeficiency virus en phagocytes can be determined by regions Species: human immunodeficiency Species Superior of type 1, Hiv-1 Species: human immunodeficiency virus en phagocytes Species: human imm	No. 8.1e-15; natches 1; Indels 0; Gaps 0; stwnwF 36	nber 1991 192: PIDN:CAA77628.1; PID:g60199 yprotein 190; DB 2; Length 851; No. 8.1e-15; No. 8.1e-15; Indels 0; Gaps 0; SLWNWF 36	virus type 1 type 1, HIV-1 9-Mar-1997 #text_change 26.Aug-1999 protein 192: PIDN:CAA77628.1; PID:g60199 yprotein 190; DB 2; Length 851; No. 8.1e-15; natches 1; Indels 0; Gaps 0; SLWNWF 36	virus type 1 type 1, HIV-1 9-Mar-1997 #text_change 26 Aug-1999 192; PIDN:CAA77628.1; PID:g60199 yprotein 190; DB 2; Length 851; No. 8.1e-15; natches 1; Indels 0; Gaps 0; 5LWNWF 36 [1 1 1 1 1 1 1 1 2 3 4.; Zhao, J.Q.; Diagne, A.; Idler, K.; Zao 1; PMID:2172833 1; PMID:2172833 1; Indels 0; Gaps 0;

RESULT VCLJH3

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Query Match
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Search completed: May 16, 2003, .11:12:06
Job time: 33.4578 secs
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                                                                                                                                                                                                                                                                   The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the polypeptide that they are linked to. The core polypeptides are any core polypeptide that may be introduced into a living system and that can pervention as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor, interferon, colony stimulating factor, hormone or interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-viral and compressed treatments. Sequences ARV88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences and form bythid columns that can be used in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; anglogenic factor.
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                                                                       1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                         hybrid polypeptides.
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97.2%;
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Pred. No. 1.8e-16;
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Query Match 96.9%; Score 190; DB 21; Length 36; Best Local Similarity 97.2%; Pred. No. 1.8e-16; Matches 35; Conservative 0; Mismatches 1; Indels 0; Gaps Oy 1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
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RESULT 15 AAY89136

AAY89136 standard; peptide;

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                                                                     The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, cespecially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any core polypeptide that may be introduced into a living system and that can concentrate of the core polypeptides are any core prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor, interleukin, interferon, colony stimulating factor, hormone or cangiogenic factor. The peptides of the invention can be used for anti-fusogenic treatments. Sequences ANY88651-y90055 represent core
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Sequence
                                           polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                       Disclosure; Page 22; 124pp; English
                                                                                                                                                                                                                                                                                                                                                       A new hybrid polypeptide with enhanced comprises enhancer sequence \dot{\ }
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TRIM-) TRIMERIS INC.
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35; Conserv
                            hybrid polypeptides.
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36 AA;
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97.28;
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Pred. No. 1.8e-16;
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                                                                                                                                                                                                                                                                                                                                                                      pharmacokinetic properties
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Lambert
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                                                                                                                                                                                       polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences ANY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends and form butters.
                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HTV-1, HTV-2 and STV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core
                                                                                                                                            Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1 HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon;
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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                    1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                             hybrid polypeptides.
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                                                                        Conservative
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                                                                                     96.9%;
97.2%;
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                                                                      Score 190; DB 21;
Pred. No. 1.8e-16;
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      AAB14533
of HIV (human immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or mimic the coiled coil solution structure of the N-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), or can correspond or mimic the C-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), or or the gp41 core 6-helix bundle, which is formed by the interaction correspond to a minic the chelical segment).

CC or the gp41 core 6-helix bundle, which is formed by the interaction of the N- and C-helical domains of three gp41 proteins. The peptides can be administered either singly or as a combination (particularly a combination of N-helical and C-helical domain peptides), and can be multimerised. For example, N- and C-helical domain peptides can be alternately linked together to form a peptide which mimics the core 6-helix bundle. Administration of the peptide which mimics the core 6-helix bundle. Administration of the peptides against gp41 are well conserved, such antibodies may be effective against a broad range of
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07-JAN-2000; 2000US-0480336
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core 6-helix bundle; viral entry inhibition; immunogenic;
antibody; humoral response; broad spectrum vaccine; anti-HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV-1; gp41 C-helical domain;
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                                                                                                                                                                                                                                                                                                                                       Sequences AAB14532-114534 and AAB14569-B14602 represent specifically claimed peptides derived from the C-helical domain of the gp41 envelope 91ycoprotein from a variety of HIV-1 isolates. The invention relates to raising a neutralising antibody response to a broad spectrum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WILD/) WILD C T. (WEIS/) WEISS C D
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; vanti-fusogenic; differentiation factor; interleukin; interferon;
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                                                                                                                      The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor,
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           interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAV88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
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35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Guthrie KI,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0082279
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                                                                                                                                                                                                                                                                                                                                                                      sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               factor; hormone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Merutka
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Anwer MK,
                                                                                                                                                                                                                                                                                                                                                                                       pharmacokinetic properties
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lambert DM
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                                                                                                                                                                                                                                                                                                                     AAB52688
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is a peptide fragment of T20/Dp178. T20/Dp178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/Dp178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/Dp178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
WPI;
                    Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wang
                                                                    05-MAY-1999;
                                                                                          05-MAY-2000;
                                                                                                               09-NOV-2000
                                                                                                                                        WO200066622-A1
                                                                                                                                                              Human immunodeficiency
                                                                                                                                                                                    formyl peptide receptor family; FPR; inflammatory chemoattractant.
                                                                                                                                                                                                                                   T20/DP178 peptide fragment #66.
                                                                                                                                                                                                                                                          23-FEB-2001
                                                                                                                                                                                                                                                                                 AAB52688
                                                                                                                                                                                                                                                                                                       AAB52688 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 12; Page 24; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (USSH)
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                                                                                                                                                                                                                                                                                                                                                                          1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                     , ML
2000-656493/63
                                                                                                                                                                                                                                                                                                                                                                 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000-656493/63.
                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                           US DEPT HEALTH
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                    Oppenheim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oppenheim
                                                                                                                                                                                                                                                                                                                                                                                                                                                           36
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                          2000WO-US12371
                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA;
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                                                                  99US-0132686.
                                                                                                                                                                                                                                                                                                         Peptide;
                     JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                       96.9%;
97.2%;
                                             & HUMAN
                                                                                                                                                              virus type
                     su
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                    s
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Pred. No. 1.8e-16;
Pred. No. 1.8e-16;
                                             SERVICES
                                                                                                                                                                                                                                                                                                         A
                     Gong W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gong W,
                                                                                                                                                                                               inflammatory response up-regulation;
                       Gao
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J,
                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murphy PM
                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                            0;
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RESULT 10
AAB52818
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Best Local
        The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is a peptide fragment of T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41 T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain gp41 plays a critical role in the fusion of HIV-1 and host cell membranes T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an
                                                                                                                                                        Claim
                                                                                                                                                                                                 Administration of peptide agents with a sequence corresponding partial length T20/Dp178 or T21/Dp107 formyl peptide receptor
                                                                                                                                                                                                                                                    WPI; 2000-656493/63.
                                                                                                                                                                                                                                                                                  Wang JM,
                                                                                                                                                                                      antagonist
                                                                                                                                                                                                                                                                                                                 (USSH ) US DEPT HEALTH & HUMAN
                                                                                                                                                                                                                                                                                                                                                                                05-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                               09-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200066622-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antiinflammatory, formyl peptide red
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      T20/DP178 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB52818 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; Page 25; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammatory response in a subject.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                     14; Page 40; 148pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l Similarity
35; Conser
                                                                                                                                                                                                                                                                                  Oppenheim JJ.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36 AA;
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                                                                                                                                                                                                                                                                                                                                                                                2000WO-US12371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                        used
                                                                                                                                                                                                                                                                                                                                                  9908-0132686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ry; T20/DP178; gp41 ectodomain; HIV-1 fusion;
receptor family; FPR; inflammatory response up-regulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fragment #97.
                                                                                                                                                                                      to modulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96.9%;
97.2%;
                                                                                                                                                                                                                                                                                    Su
                                                                                                                                                     English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 190; DB 21;
Pred. No. 1.8e-16;
                                                                                                                                                                                        inflammation
                                                                                                                                                                                                                                                                                                                    SERVICES
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                                                                                                                                                                                                                                                                                Gong W,
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                                                                                                                                                                                                                                                                                    Gao
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                                                                                                                                                                                                                                                                                  Murphy
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inflammatory response in

subject

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RESULT 6
AAY31955
RESULT 7
AAY31974
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FHX
                                                                                                                                                                                                    The present sequence represents an N- and C-terminal modified peptide, designated T-20 (or DP-178), corresponding to amino acids 638-673 of the transmembrane protein gp41 of HTV-1 LAI isolate.

The invention relates to methods for the synthesis of peptides, in particular T-20 and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T20-like peptide, followed by deprotection of the side chains to yield the final T-20 or T-20-like peptide. The invention act as intermediates in the synthesis of peptides of interest (e.g. T-20), and to particular groups of peptide fragments which act as intermediates in the synthesis of the peptide of interest. The method allows for the large scale, economical production of high
                                                                                                                        Query Match
Best Local S
                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T-20; DP-178; HIV-1 LAI; gp41; peptide synthesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY31955;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 102; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9948513-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic peptide T-20 (DP-178).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY31955 standard; Peptide;
                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                T-20 like peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Methods of peptide synthesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-591038/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kang M, Bray B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAR-1998;
01-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAR-1999;
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                                                                                                                                                                                             purity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1
                                                        \vdash
                                                                    YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                    YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                              peptides.
                                                                                                                          Similarity
                                                                                                                                                                   36
                                                                                                             Conservative
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                                                                                                                                                                   AA,
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98US-0071877
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "N-terminal acetyl'
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                                                                                                                        96.9%;
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                                                                                                                        Score 190;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mader
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            particularly used to produce T-20 or
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                                                                                                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Merutka
                                                                                                                        DB 20;
L.8e-16;
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                                                                                                                                    Length 36;
                                                                                                           0;
                                                                                                          Gaps
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AAB52655 ID AAB5

AAB52655 standard; Peptide;

36

RESULT

T20/DP178 peptide fragment #33.

AAB52655; 23-FEB-2001

(first entry)

Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response up-regulation;

chemoattractant

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                                                                                                                      The present sequence represents a peptide, designated T-20 (or DP-178), that corresponds to amino acids 638-673 of the transmembrane protein gp41 of HIV-1 LAI isolate. The invention relates to methods for the synthesis of peptides, in particular C - and N-terminal modified T-20 (see ANY1955) and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates (see ANY1955-73) of T-20 or a T-20-like peptide on a solid support, coupling the protected T-20-like peptide on a solid support, coupling the protected followed by deprotection of the side chains to yield the final T-20 or T-20-like peptide. The invention also relates to individual peptides of interest (e.g. T-20), and to particular groups of peptide fragments which act as intermediates in the synthesis of the peptide of interest. The method allows for the large scale,
                                                                            Query Match
Best Local :
                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-MAR-1998;
01-MAY-1998;
                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 9; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods of peptide synthesis, particularly used to produce T-20 like peptides \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-591038/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kang M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-SEP-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T-20; DP-178; HIV-1 LAI; gp41; peptide synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HIV-1 LAI gp41 T-20 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY31974 standard; Peptide;
                                                                          Local
1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                             35;
                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bray B,
                                                                                                                                                    production of high purity peptides.
                                                                                                                      36 AA;
                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0045920.
98US-0071877.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lichty M,
                                                                          96.9%;
97.2%;
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                                                                          Score 190;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mader C,
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Merutka
                                                                          DB 20;
.8e-16;
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                                                                                       Length 36;
                                                             Indels
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                                                            Gaps
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RESULT 4 AAY22912

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                                                                                                             Matches
                                                        Query Match
Best Local
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                                                                                                                                                              constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention
                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptides AAY22805-Y22917 are derived from Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Braisted A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV; gp41 protein; vaccine; antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO. 108 from WO9820036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY22912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY22912 standard; Peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunoglobulin
                                                                                                                                                 forms of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
 1 YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                         1 Similarity
35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Specifically, AAY22810-Y22910 are derived from gp41 proteins in HIV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and
                                                                                                                                               "floppy"
                                                                                                             36 AA;
                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Judice JK,
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96US-0743698
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 233-234; 279pp; English.
                                                                                                                                                 peptides or proteins.
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                                                        96.9%;
97.2%;
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                                     Score 190; DE
Pred. No. 1.8e
0; Mismatches
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                                                      DB 19;
L.8e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunodeficiency virus
                                                                       Length 36;
                                         Indels
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                                     Gaps
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

밁 Qy

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YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF 36

Matches

35;

Conservative

Indels

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RESULT 5
AAY22805
ID AAY2
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Best Local :
                                                                                                                         of ligands (particularly where complete binding protein is no available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for of synthetic antibody clones from phage display libraries, or
                                                                                                                                                                                            constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification
                                                                                                                                                                                                                                                  AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HTV infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain
                                                                                                                                                                                                                                                                                                                                                                                                                              Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus (HTV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HTV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and
                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 143-144;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIV; gp41 protein; constrained helical peptide; HIV vaccine; antibody; viral membrane fusion; viral infeligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Braisted A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-AUG-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wells
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                                                                                                          0f
                  Similarity
                                                                                                  "floppy" peptides or proteins.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  from
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96US-0743698
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                96.9%;
97.2%;
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Pred. No. 1.8e
); Mismatches
                Score 190; DB 19;
Pred. No. 1.8e-16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            infectivity;
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                                                                                                                                                                             is not readily
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             638 to 673 of the HIV-1 isolate LAI transmembrane protein 9p41. It forms a putative alpha helix at the C-terminal end of the 9p41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein-protein interactions, and possess anti-viral activity. Homologues of these peptides were identified by a computer assisted peptide sequence search. The peptides inhibits transmission to uninfected cells, and can also be used as type and/or subtype specific
                                                                                                                                                                                                                                                                                                                        (TRIM-)
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                   Disclosure; Fig 1; 471pp; English
                                                                       Inhibiting viral transmission, e.g. HIV or RSV, to a cell - using an isolated peptide recognised by an ALLMOTI5, 107x178x4 or PLZIP sequence search motif
                                                                                                                                                                                   WPI; 1996-309517/31
                                                                                                                                                                                                                                                                                                                                                                                                        06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-JUN-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09619495-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antifusogenic activity; antiviral capability; coiled-coil ALLMOTI5; 107x178x4; PLZIP search motif; viral transmissic influenza virus; hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DP178 corresponds to residues 638-673 of HIV-1(LAI) gp41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Computer search generated synthetic peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1995-036105/05
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Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-DEC-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity
35; Conserv
                                                                                                                                                                                                                                                                                                                        TRIMERIS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tools.
                                                                                                                                                                                                                                   Bolognesi DP,
Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bolognesi DP,
, Wild CT;
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                                                                                                                                                                                                                                                                                                                                                                                                     95US-0470896.
94US-0360107.
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97.28;
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                                                                                                                                                                                                                                      Lambert DM, wild CT;
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Pred. No. 1.8e-16;
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Matches

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YTSLIHRLIEESQNQQEKNEQELLELDKWASLWNWF

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RESULT 3
AAW17011
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Matches 35
                                     Query Match
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                                                                                                                                                                                   AAW17011 represents a peptide designated DP-178, a peptide derived from HIV type 1 glycoprotein 41 (gp41) transmembrane protein. The peptide corresponds to residues 638-673 of gp41. DP-178 and its derivatives are used in combination with a therapeutic agent, e.g.
                                                                                                                                                                                                                                                                                                                    Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent - useful for treatment of HIV infection, inhibiting replication or transmission of HIV.
                                                                           Sequence
                                                                                                            also be used in vaccines for protecting against
                                                                                                                            reverse transcriptase, viral protease, cytokine, glycosylation or viral mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication or inhibiting transmission. They may
                                                                                                                                                                                                                                                                                    Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV; SIV: human; simian immunodeficiency virus; transmembrane; antiviral; DP-178; DP-107; vaccir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV-1 derived peptide useful for treatment of HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JUN-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUN-1995;
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Local Similarity 97.: 10s 35; Conservative
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35; Conser
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                                                                                                                                                                                                                                                                                  Figure 1; 84pp; English.
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               96.9%;
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Perfect score:
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length: 2000000000
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Gapop 10.0 , Gapext 0.5
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196
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147.792 Million cell updates/sec
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                              Length
         GenCore version 5.1.4_p5_4578 (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                DB
         16
18
19
20
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21
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     AAR64364
AAR98398
AAW17011
AAY22912
AAY31955
AAY31974
AAB52655
AAB52688
AAB52688
                                                                                                                                                                                                                                                                    SUMMARIES
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HIV-1 derived pept SEQ ID NO. 108 fro SEO ID NO. 1 from Synthetic peptide HIV-1 LAI 9941 T-2 T20/DP178 peptide T20/DP178 peptide T20/DP178 peptide
                                                                                                                                                                                                            Description
                                                                                                                                                   DP-178 derived fro DP178 corresponds
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Viral Viral HIV-1

ALIGNMENTS

RESULT 1 AAR64364 antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI; human immunodeficiency virus; transmembrane protein; gp41 alpha helix; leucine zipper; DP-185. 07-JUN-1993; 24-AUG-1995 (first entry) 07-JUN-1994; 22-DEC-1994 WO9428920-A Modified-site Synthetic DP-178 derived from HIV-1 isolate LAI has antiviral activity AAR64364; AAR64364 standard; Peptide; Modified-site 93US-0073028 94WO-US05739. 38 ∕note≕ Location/Qualifiers /note= "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic macromolecular carrier gp. attached" "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier gp. attached" $\,$ 36 Ą protein; gp41; or S

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APPLICANT: Wild, Carl T.

APPLICANT: Wild, Carl T.

APPLICANT: Allaway, Graham P.

FILE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors

FILE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors

FILE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors

FILE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors

FILE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors

FILE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors

FILE OF INVENTION: Assay for Detection Inhibitors

FUSION: FILE OF INVENTION: Assay for Detection Inhibitors

CURRENT FILE OF INVENTION: DETECTION OF INDICATE: 2000-09-28

PRIOR APPLICATION NUMBER: US 60/235,901

PRIOR FILING DATE: 2000-09-28

PRIOR FILING DATE: 2000-09-21

NUMBER: US 60/235,901

PRIOR FILING DATE: 2000-09-28

PRIOR FILING DATE: US 60/181,543

PRIOR FILING DATE: US 60/281,901

SEQ ID NO 41

LENGTH: 46

TYPE: PRT

ORGANISM: Human immunodeficiency virus type 1

US-09-779-451-41

US-09-779-451-41

US-09-779-451-41

US-09-779-451-41

ORGANISM: Human immunodeficiency virus type 1

ORGANISM: Human immunodefic
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RESULT 13
US-09-854-816-108
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                                                                                                                                                                                                                                                                                                                  Sequence 108, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 08/965,056
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                             James A. Wells TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFFICATION: <UNKnown>
PRIOR APPLICATION DATA:
                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: Linear MOLECULE TYPE: DP178
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ADDRESSEE: Genente
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           COUNTRY: USA
ZIP: 94080
                                               STATE: California
                                                                   CITY: South San
                                                                                      STREET: 1 DNA Way
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                                                                                                      ADDRESSEE: Genentech, Inc
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Melissa A. Starovasnik
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                                                                                                                                                                                                                                                          Robert S. McDowell
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J. Christopher Phelan
Melissa A. Starovasnik
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97.28;
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                                                                   Francisco
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    Mismatches

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Pred. No. 6.5e-16;
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RESULT 15
US-09-779-451-41
; Sequence 41, Application US/09779451
; Patent No. US20020094521A1
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; OTHER INFORMATION: DP178c peptide US-09-848-616-176
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CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Publication No. US20 GENERAL INFORMATION:
                                                                              Matches
                                                                                                Query Match
Best Local
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TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Sebbel, Peter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 108:
                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                  ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                      ENGTH: 37
                                                                            Local Similarity es 35; Conserv
2 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 37
                                      1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Timothy E
REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION DATA:
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MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
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TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 36 amino acids
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Tissot, Alain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dunant, Nicolas
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                                                                              Conservative
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                                                                                            97.48;
97.28;
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                                                                                              Score 189; DB 9; pred. No. 6.7e-16;
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Pred. No. 6.5e-16;
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                                                                                                                                  ; NAME/KEY: PEPTIDE
; LOCATION: (1)..(36)
; OTHER INFORMATION: T-20
US-09-796-202-10
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US-09-493-346-1
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Best Local S
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Best Local :
                                                                  Matches
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CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
ITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
ILE REFERENCE: 2048/61010/JPW/SHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1 TITLE OF INVENTION: Infection FILE REFERENCE: 61009
                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version 3.0
SEQ ID NO 10
LENGTH: 36
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CURRENT FILING DATE: 2001-02-28
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TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                    ORGANISM: unknown
                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.4%;
Local Similarity 97.2%;
les 35; Conservation
                                                                                Local Similarity
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                  Conservative
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                                                                              97.48;
97.28;
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97.28;
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Pred. No. 6.5e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 189; DB 9;
Pred. No. 6.5e-16;
1; Mismatches 0
                                                                            Score 189; DB 10;
Pred. No. 6.5e-16;
                                                                Mismatches
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TYPE: PRT
; ORGANISM: Human immunodeficiency virus type
US-09-779-451-5
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US-09-779-451-5
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                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
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Best Local S
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                                                                           Matches
                                                                                           Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/09834628 Patent No. US20020119922A1
                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: PEPTIDES FOR INHIBITION OF HIV INFECTION FILE REFERENCE: 05823 0198-00000 CURRENT PROLICATION NUMBER: US/09/834,628 CURRENT FILING DATE: 2001-04-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/779,451 CURRENT FILING DATE: 2001-08-17 PRIOR APPLICATION NUMBER: US 60/235,901 PRIOR FILING DATE: 2000-09-28 PRIOR APPLICATION NUMBER: US 60/181,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2000-02-10 NUMBER OF SEQ ID NOS: 77
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                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: KIM, KEY-SUN APPLICANT: JIN, BONG-SUK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: YU, YEON GYU
                                                                                                                                                                                                                                                                 LENGTH: 36
TYPE: PRT
                                                                                                                                                                     OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                         Local Similarity 97.
                   1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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35; Conser
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                                                                                       97.4%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97.48;
97.28;
                                                                         Score 189; DB 10;
Pred. No. 6.5e-16;
1; Mismatches 0;
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Pred. No. 6.5e-16;
1; Mismatches 0
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                                                                                                           Length 36;
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RESULT 12 US-09-854-816-1

Sequence 1, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:

Andrew C.

Braisted

COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 i

inch, 1.44 Mb floppy disk

CITY: South San Francisco STATE: California

COUNTRY: USA

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                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
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FILING DATE: CUDKNOWN
ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEPHONE: 650/952-9881
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PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/965,056
                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Constrained Helical Peptides and Methods of
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FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                  STATE: California
                                                                                                                                                                                                                                                                  CITY: South San Francisco
                                                                                                                                                                                                                                                                                    STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                         ADDRESSEE: Genentech, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: WinPatin
                                                                                                                                                                                                               94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Andrew C. Braisted
J. Kevin Judice
                                                                                                                                                                                                                                                                                                                                                                                                                    J. Christopher Phelan
Melissa A. Starovasník
                                                                                                                                                                                                                                                                                                                                                                                                    James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                           Making Same
: 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 191; DB 10;
Pred. No. 3.2e-15;
1; Mismatches 0
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; ORGANISM: Homo sapiens US-10-116-797-1
                                                                                                                                                                                                                                                                                                                                               US-10-116-797-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT ; ORGANISM: Fusion Inhibitor Peptide US-09-874-475-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-874-475-16
                                                                                  SOFTWARE: PatentIn version 3.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                Sequence 1, Application US/10116797
Publication No. US20030044411A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 36
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Best Local Similarity
Matches 35; Conserv
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Best Local Similarity
Matches 35; Conserv
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                                                                                                                             CURRENT APPLICATION NUMBER: US/10/116,797
CURRENT FILING DATE: 2002-10-15
NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                                         APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING HIV-1 INFECTION
                                                                                                                                                                                       FILE REFERENCE: 64672-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE
TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS
FILE REFERENCE: 2793/65166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Petropoulos, Christos J.
APPLICANT: Parkin, Neil T.
APPLICANT: Whitcomb, Jeanette
APPLICANT: Huang, Wei
                                        LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 269 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         169 YTSLIYSLIKESQNQQEKNEQELLELDKWASLWNWF 204
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REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
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97.2%;

    Mismatches

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Pred. No. 6.5e-16;
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Pred. No. 4.1e-15;
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RESULT 3
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Best Local Similarity
                                                                                                                  Matches
                                                                                                                                                Query Match
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TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 50:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168 YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                Local
                                                                               1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: cUnknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/965,056
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: TOICHIA, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: 1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                    SEQUENCE DESCRIPTION: SEQ ID NO: 50:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
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                                                                                                                  l Similarity
35; Conserv
                                                                                                                                                                                                                     LENGTH: 233 amino acids TYPE: Amino Acid TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: WinPatin (Genentech)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: South San
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 268 amino acids
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Robert S. McDowell
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97.2%;
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                                                                                                                 Score 191; DB 10;
Pred. No. 2.7e-15;
1; Mismatches 0;
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Pred. No. 2.4e-15;
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                                                                                                                                                Length 233;
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RESULT 4
US-09-854-816-12
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                                                                                                                                                                                                                                       Sequence 12, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                            Match 98.5%;
Local Similarity 97.2%;
les 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
FILING DATE: CUNKNOWN
ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA:
                                   NUMBER OF SEQUENCES: 11 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                               TITLE OF INVENTION: Constrained
                                                                                                                                                                                                                   APPLICANT: Andrew C. Braisted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 268 amino acids TYPE: Amino Acid TOPOLOGY: Linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
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STREET: 1 DNA Way
STREET: 1 DNA Way
                  ADDRESSEE: Genentech,
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                                                                                                                   Melissa A. Starovasnik
James A. Wells
                                                                                                                                                       J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
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J. Christopher Phelan
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                                                                          Making
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 191; DB 10;
Pred. No. 3.1e-15;
1; Mismatches 0
                                                                              Same
                                                                                               Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.
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Database :
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                362588 seqs, 96450795 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      May 16, 2003, 11:20:00; Search time 15.759 Seconds (without alignments) 220.333 Million cell updates/sec
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194
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                             /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
                                                                                                                                                                                         cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
                                                                           cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
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                                                                                                                                                                                                                                           _NEW_PUB.pep:*
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score greater than or equal to the and is derived by analysis of the Pred. No. is the number of results predicted by chance to have a ster than or equal to the score of the result being printed. total score

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Result

Result	Score	% Query Match	Length	BI	ID	Description
1	192	99.0	268	10	US-09-854-816-13	Sequence 13, Appl
2	191	98.5	233	10	US-09-854-816-50	50,
ω	191	98.5	268	10	US-09-854-816-9	9, 1
4	191	98.5	269	10	US-09-854-816-12	12,
ហ	190	97.9	269	10	US-09-854-816-46	46,
σ	189	97.4	36	9	US-09-874-475-16	16,
7	189	97.4	36	9	US-10-116-797-1	
æ	189	97.4	36	9	US-09-493-346-1	1,
9	189	97.4	36	10	US-09-796-202-10	Sequence 10, Appl
10	189	97.4	36	10	US-09-779-451-5	Sequence 5, Appli
11	189	97.4	36	10	US-09-834-628-1	Sequence 1, Appli
12	189	97.4	36	10	US-09-854-816-1	1,
13	189	97.4	36	10	US-09-854-816-108	108
14	189	97.4	37	9	US-09-848-616-176	Sequence 176, App
15	189	97.4	46	10	US-09-779-451-41	
16	189	97.4	56	10	US-09-779-451-4	Sequence 4, Appli
17	189	97.4	177	9	US-10-040-349B-2	Sequence 2, Appli
18	189	97.4	221	9	US-10-059-271-84	84,
19	189	97.4	232	9	US-10-059-271-81	81,

ALIGNMENTS

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US-09-854-816-13
Sequence 13, Application US/09854816
Patent No. US/0020151473A1
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA: APPLICATION UMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: CUnknown>
                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/965,056
FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Andrew C. Braisted J. Kevin Judice Robert S. McDowell
                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Genentech, Inc. STREET: 1 DNA Way
                          TELEFAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94080
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APPLICANT:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                         quence 14, Application US/07956483 tent No. 6261799 ENERAL INFORMATION:
                                                                                                                             COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                           TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: TORCHIA, PhD., Timothy
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                              SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: WinPatin (Ger
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
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                                                                                                                                                                                                                                                                                                                APPLICANT:
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TYPE: A
                                                                                                                                                                            STREET: P.O. Box
CITY: Alexandria
STATE: Virginia
FILING DATE: 3: CLASSIFICATION:
                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CLASSIFICATION:
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STREET: 1 DNA Way
CITY: South San Francisco
           APPLICATION NUMBER: US/0
FILING DATE: 31-DEC-1992
                                                                                                                                                          COUNTRY:
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Amino Acid
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Y: United States
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                                                                                                                                                                                                                                                                                                               KIENY, Marie-Paule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
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9p160 VARIANT
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97.2%;
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113
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                              US/07/956,483
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6271198-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Timothy E.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P1005R2
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Pred. No. 2.7e-16;
1; Mismatches 0;
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                                                              Query Match
Best Local Similarity
Matches 35; Conserv
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INFORMATION FOR SEQ ID NO:
                                                                                                                                               TOPOLOGY: 1
MOLECULE TYPE:
                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 855 amino acids
                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 36,113
REFERENCE/DOCKET NUMBER: 017753-005
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 02-MAY-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
638 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 673
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: WO 92/19742 FILING DATE: 12-NOV-1992
                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                                                                                                                                                                                                                              NAME: Crane-Feury, Sharon E
                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                             1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                               amino acid
                                                                                                                                                                                                                                                               (703)
                                                               Conservative
                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                               (703) 836-6620
                                                                                                                                               DNA (genomic)
                                                                                                                                                                                single
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                                                                             98.5%;
97.2%;
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                                                                             Score 191; DB 4;
Pred. No. 9.5e-16;
                                                               Mismatches
                                                                 0
                                                                                             Length 855;
                                                               0,
                                                              Gaps
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Search completed: May 16, 2003, 11:22:13 Job time: 10.1928 secs

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US-09-570-921-27

Sequence 27, Application US/09570921

Patent No. 6455265
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Best Local Similarity
Thickes 35; Conserva
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US-08-965-056-50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/570,921
CURRENT FILING DATE: 2000-05-15
PRIOR APPLICATION NUMBER: PCT/FR98/02447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: METHOD FOR OBTAINING VACCINES FOR PREVENTING THE TITLE OF INVENTION: PATHOGENIC EFFECTS RELATED TO A RETROVIRAL INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: FR/97/14387 PRIOR FILING DATE: 1997-11-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE:
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                NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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                                                            ATTORNEY/AGENT INFORMATION:
NAME: TORCHIA, PhD., Tinoth;
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH: 138
                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/965,05
FILING DATE: 05-No. 6271198-1997
                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Andrew C. Braisted APPLICANT: J. Kevin Judice APPLICANT: Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                TELEFAX:
                                                                                                                                                  FILING DATE: 0:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                          STREET: 1 DNA Way
CITY: South San Francisco
                                                TELEPHONE:
                                                                                                                                                                                                                        SOFTWARE:
                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                      MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99 YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 134
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5271198
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                                                                                                                                                                                                                                                                                                             94080
CHARACTERISTICS:
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                                650/952-9881
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                                                                                                                                                                                                                                                                                                                             USA
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Melissa A. Starovasnik
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UMBER: PCT/FR98/02447
1998-11-17
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113
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97.2%;
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                                                                                                                                                                                      US/08/965,056
                                                                                                                Timothy E.
                                                                                  P1005R2
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Pred. No. 1
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l.3e-16;
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RESULT 14 US-08-965-056-12

Sequence 12, Application US/08965056 Patent No. 6271198

GENERAL INFORMATION:

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US-08-965-056-9
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Best Local Similarity
Matches 35; Conserv
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                                                             Matches
                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                             TELEFAX: 650/95
INFORMATION FOR SEQ
                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: TOTCHLA, Phb., Timoth
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 05-NO. 62
                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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168 YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             168 YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 203
                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: 3.5 inch, 1.44 Mb: COMPUTER: IBM PC COMPUTER: DC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                             Local Similarity
les 35; Conserv
                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: South San Francisco
                              1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                           TELEPHONE:
                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 94080
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                                                                                                                                                  : 268 amino acids
Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : 233 amino acids
Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              California
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                                                                                                                                                                                                           650/952-9881
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                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Melissa A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Christopher Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Andrew C.
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                                                                                                                                      Linear
                                                                                                                                                                                                                            650/225-8674
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                                                                                                                                                                                               ID NO: 9:
                                                                           98.5%;
97.2%;
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97.2%;
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6271198-1997
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                                                                                                                                                                                                                                                                                  Timothy E.
                                                                                                                                                                                                                                                                                                                                                                                                                    1.44 Mb floppy disk
                                                                                                                                                                                                                                                        P1005R2
                                                                          Score 191; DB 4;
Pred. No. 2.7e-16;
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Pred. No. 2.3e-16;
                                                            Mismatches
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                                                                                         Length 268;
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                                                                                                                                                                                                       Sequence 6,
                                                                                                                                                                                        Patent No. 586931
                                                                                                                                                                         GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 421792
NFORMATION FOR SEQ ID NO:
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APPLICANT:
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STREET: NEW YORK
CITY: NEW YORK
TATE: NEW YORK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN & FINNEGAN
                                        CORRESPONDENCE ADDRESS:
                                                       TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: LESLIE A. SERUNIAN
REGISTRATION NUMBER: 35,
                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
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                                                                                                          APPLICANT:
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                                                                                                                                                                                                                                                                                     636 YTSIIYSLIEESQNQQEKNEQELLELDKWASLWNWF 671
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/022,835
FILING DATE: 25-FEB-193
APPLICATION NUMBER: US 07/599,491
FILING DATE: 17-OCT-1990
             STREET:
                            ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                     1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                      Similarity
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NEW YORK
                                                                                                                                                                                                       Application US/08647714
                                                                                                                      REITZ, JR., MARVIN S.; FRANCHINI,
GENOVEFFA; MARKHAM, PHILIP D. GALLO, ROBERT
C.; LORI, FRANCO C.; POPOVIC, MIKULAS; AND
           E: MORGAN & FINNEGAN
345 PARK AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             345 PARK AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (212) 751-6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GARTNER, SUZANNE
VENTION: MOLECULAR CLONES OF HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REITZ, JR., MARVIN S.; FRANCHINI,
GENOVEFFA; MARKHAM, PHILIP D. GALLO, ROBERT
C.; LORL, FRANCO C.; POPOVIC, MIKULAS; AND
                                                                                                       GARTNER, SUZANNE
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WORDPERFECT 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IBM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                    protein
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                                                                          MOLECULAR CLONES OF HIV-1
AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                    99.0%;
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Pred. No. 7.
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                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                    .2e-16;
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; MOLECULE TYPE:
US-08-647-714-6
                                                                                                                               ; ORGANISM: Human US-09-570-921-12
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US-09-570-921-12
                                                              Query Match
Best Local Similarity
Matches 35; Conserv
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Patent No. 6455265
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Best Local Similarity
                                                                                                                                                                                                SEQ ID NO 12
                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: FR/
PRIOR FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 144
                                                                                                                                                                                                                   SOFTWARE:
                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PCT/FR98/02447 PRIOR FILING DATE: 1998-11-17
                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/570,921
CURRENT FILING DATE: 2000-05-15
                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE: 106
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                              LENGTH: 138
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
LENGTH: 855 amino acid
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NAME: LESLIE A. SERUNTAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WORDPERFECT 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 25-FEB-1993
APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1990
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COUNTRY: USA
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                             1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 134
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                                                                                                                                                                                                                 PatentIn
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                                                                                                                                                                                                                                                                                                                                                                                                   SERRES, PIERRE-FRÂNCOIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                212) 758-4800
(212) 751-6849
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                    106213
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
                                                                                                                                                                                                                   Ver.
                                                                                                                                                                                                                                                                                                                                                                  METHOD FOR OBTAINING VACCINES FOR PREVENTING THE PATHOGENIC EFFECTS RELATED TO A RETROVIRAL INFECTION
                                                                                                                                                                                                                                                                                                                2000-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.0%;
97.2%;
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                                                                            Score 191; DB 4;
Pred. No. 1.3e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 192; DB 2;
Pred. No. 7.2e-16;
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                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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                                                                                              Length 138;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
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TELEFAX: 650/952-9881
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
                                                     REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                          CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Torchia, PhD., Time
REGISTRATION NUMBER: 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: CONSTITUTE OF INVENTION: Making Same
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                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 94080
                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
                                   TELEPHONE:
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Local Similarity 100.0%;
les 36; Conservative (
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APPLICATION NUMBER: US/09/492,739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 14918-704
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-393-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Haliday, Emily
REGISTRATION NUMBER: 38903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                       SSEE: Genentech, Inc.
T: 1 DNA Way
South San Francisco
California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/08965056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Melissa A. Starovasnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Andrew C.
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Score 194; DB 4 Pred. No. 4e-16; Mismatches

0;

Indels

0,

DB 4; Length 850;

Constrained Helical Peptides and Methods of

6271198-1997 US/08/965,056

1.44 Mb floppy disk

Timothy E.

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                                                                                                           MOLECULE TYPE: protein US-08-022-835-6
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                                                        Matches
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                                                                   Query Match
Best Local Similarity
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Best Local Similarity
                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 855 amino acid
                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 861-3000
                                                                                                                                                                                                                                                                                                 FILING DATE: 17-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: Scott, Watson T.
                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: (
                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 20036-5601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
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636 YTSIIYSLIEESQNQQEKNEQELLELDKWASLWNWF 671
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                                                                                                                                         TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 26 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Washington
              1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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6714627
                                                                                                                                                                                                                                                                                               Scott, Watson T
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Amino Acid
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                                                                                                                                                                     855 amino acids
                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Garnter, Suzanne
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Markham,
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                                                                   99.0%;
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97.2%;
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Genoveffa
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                                                                                                                                                                                                                                                                                  26,581
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                                                                   Score 192; DB 1; Pred. No. 7.2e-16;
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Pred. No. 2e-16;
                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                              Version #1.25
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                                                                                Length 855;
                                                       Indels
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                                                                                                                      US-08-448-603A-28
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NUMBER OF SEQ ID NOS: 1667
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 642
                                                            Matches
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Best Local :
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equence 28, AFE
and 5864027
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TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 38903
REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-393-2000
                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA: 08/072,833
                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Berman, Phillip m.
APPLICANT: Nakamura, Gerald R.
APPLICANT: Nakamura, Gerald R.
TITLE OF INVENTION: HIV Envelope Polypeptides
                                                                                                                                                                                                                                                                                                                                   FILING DATE: 07-JUN-93 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
632
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                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 07
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 3 Embarcade:
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Watch 100.0%; Score 194; DB 4; Local Similarity 100.0%; Pred. No. 1.3e-17; nes 36; Conservative 0; Mismatches 0;
                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: sin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 94111
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                                                           Local Similarity
les 36; Conserv
                                                                                                                                                                                                                                             TELEFAX: 415-393-2286
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
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                                                                                                                                                                                LENGTH:
YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 667
                                                                                                                                                                                                                                                                                                                     Haliday, Emily
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                                                            Conservative
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                                                                                                                                    linear
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                                                         Score 194; DB 2
Pred. No. 4e-16;
Mismatches
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                                                                                        DB 2;
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                                                            Indels
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US-09-492-739-28

Sequence 28, Application Patent No. 6331404
GENERAL INFORMATION:

Application US/09492739

APPLICANT: Berman, Phillip W.

Nakamura,

Gerald R.

COUNTRY: USA
ZIP: 94111
COMPUTER READABLE FORM:

CITY: San Francisco STATE: CA

COMPUTER: OPERATING

IBM Compatible SYSTEM: DOS

MEDIUM TYPE: Diskette

CORRESPONDENCE ADDRESS:
ADDRESSEE: McCutchen, Doyle, Brown & Enersen, LLP
STREET: 3 Embarcadero Center

TITLE OF INVENTION: HIV Envelope Polypeptides NUMBER OF SEQUENCES: 33

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Query Match
Best Local Similarity
Watches 36; Conserve
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US-09-134-075-28
                                                                                                                                                              US-09-134-075-28
RESULT 5
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                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 415-393-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
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PRIOR APPLICATION DATA:
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                                          632 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 667
                                                                                                                                                                        STRANDEDNESS: Sir
                                                                                                                                                                                                          TYPE:
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                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                          NAME: Haliday, Emily REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/134,075 FILING DATE:
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                                                        1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                      ENGTH:
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                                                                                                                                                                                                                   850 amino acids
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                                                                                                     Conservative
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/ENTION: HIV Envelope
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                                                                                                   Score 194; DB 3
Pred. No. 4e-16;
); Mismatches
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                                                                                                                                DB 3;
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                                                                                                                               Length 850;
                                                                                                     Indels
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Result
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Maximum Match 100%

Listing first 45 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed.
                                                                                                                                                                                                                                                                                                                              Score
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                                                                                                                                                                                                                                                                                                                                                                                                                                Issued_Patents_AA:*
1: /cgn2_6/ptodata/1
2: /cgn2_6/ptodata/1
3: /cgn2_6/ptodata/1
4: /cgn2_6/ptodata/1
5: /cgn2_6/ptodata/1
6: /cgn2_6/ptodata/1
   Match
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Gapop 10.0 , Gapext 0.5
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194
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Copyright (c) 1993 - 2003
                                                                                                                                                                                                                                                                                                                                                                                                                              /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/Packfiles1.pep:*
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20000000000
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US-09-315-304B-622
US-08-448-603A-28
US-09-134-075-28
US-09-492-739-28
US-09-492-739-28
US-08-08-08-809-6
US-08-08-809-6
US-08-647-714-6
US-08-9570-921-27
US-08-9570-921-27
US-08-965-056-50
US-08-965-056-50
US-08-965-056-50
US-08-965-056-12
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US-08-965-056-12
US-08-965-056-12
US-08-965-056-13
                                                                   US-08-965-056-46
US-08-073-028-1
US-08-486-099-1
US-09-071-877-1
US-09-360-107A-1
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Compugen Ltd.
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28, Appli
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11, Appli
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45	44	43	42	41	40	39	38	37	36	35	34	ω G	32	31	30	29	28
189	189	189	189	189	189	. 189	189	189	189	189	189	189	189	189	189	189	189
97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
US-08-474-349A-413	US-08-474-349A-399	US-08-474-349A-1	US-09-045-920-1	US-08-965-056-108	US-08-965-056-1	US-09-082-279B-1161	US-09-082-279B-1121	US-09-082-279B-1076	US-09-082-279B-834	US-09-082-279B-705	US-09-082-279B-631	US-09-082-279B-630	US-09-082-279B-603	US-09-082-279B-498	US-09-082-279B-497	US-09-082-279B-15	US-08-485-264A-1
Sequence 413, App	Sequence 399, App	Sequence 1, Appli	Sequence 1, Appli		Sequence 1, Appli	Sequence 1161, Ap	Sequence 1121, Ap	Sequence 1076, Ap	Sequence 834, App	Sequence 705, App	Sequence 631, App	Sequence 630, App	Sequence 603, App	Sequence 498, App	`,	Sequence 15, Appl	Sequence 1, Appli

ALIGNMENTS

RESULT 1 US-09-082-279B-642

Sequence 642, Application US/09082279B Patent'No. 6258782

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US-09-315-304B-642
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
CURRENT FILING NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 642
LENGTH: 36
                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                   Sequence 642, Application US/09315304B Patent No. 6348568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Barney,
                                                 APPLICANT: Barney, S.
APPLICANT: Guthrie, K.
APPLICANT: Merutka, G.
APPLICANT: Anwer, M.
APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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APPLICANT:
APPLICANT:
                 CURRENT APPLICATION NUMBER: US/09/315,304B CURRENT FILING DATE: 1999-05-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Core polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
nes 36; Conser
                                                                                                                                                                                                                                                                                                                                  1 YTSLIYSLIEESQNQQEKNEQELLELDKWASLWNWF
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APPLICATION NUMBER:
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Merutka, Gene
Anwer, Mohmed
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09/082,279
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Pred. No. 1.3e-17
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US-08-484-223B-1 US-08-919-597-1 8-475-668A-1 8-485-551A-1

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

OM protein - protein search, using sw model

Run on: May 16, 2003, 11:04:54; Search time 12.1446 Seconds (without alignments) 284.970 Million cell updates/sec

Title:
Perfect score:
Sequence:

US-09-623-533A-540 196 1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36

Scoring table:

Searched:

BLOSUM62 Gapop 10.0 , Gapext 0.5

l number of hits satisfying chosen parameters: 283224

283224 seqs, 96134422 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Meximum Match 100%
Listing first 45 summaries

Database : pIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	6	5	4	ω	2	נ	110.	Result
167	167	169	170	173	174	174	174	174	174	177	177	180	181	181	181	183	183	183	185	185	186	187	187	190	192	192	192	192	0000	
85.2		86.2						88.8						92.3		93.4	93.4	93.4	94.4	•	94.9	95.4				98.0		98.0	Tid CC11	
852	729	846	843	357	859	855	853	852	357	445	357	855	358	358	358	856	847	847	856	443	357	358	357	861	861	856	854	851		
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VCLJBR	VCLJKX	VCLJND	H44001	S22004	VCLJMN	VCLJZR	S54384	T12016	S21992	A41621	S22006	VCLJA2	S70417	S22000	S22002	VCLJVL	S13289	T09448	VCLJ3W	C41621	S21996	S21998	S21994	VCLJSC	VCLJLV	VCLJH3	S13288	S33985		=
	env polyprotein pr		env polyprotein pr	\neg		TO.		glycopro	envelope protein g	protein M	\neg	protein	protein		envelope protein g	env polyprotein pr	env protein - huma	envelope glycoprot		protein F		protein	₽,	polyprotein	ņ	polyprotei	env protein - huma	env polyprotein -	Describeron	7

RESULT 3 VCLJH3

ALIGNMENTS

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Qy 1 YTSLIHTLIEESQNQOEKNEQELLELDKWASLWNWF 36 :	Query Match 98.0%; Score 192; DB 2; Length 854; Best Local Similarity 97.2%; Pred. No. 3.2e-15; Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;	R;O'Brien, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, A.; Idler, K.; Zack, Nature 348, 69-73, 1990 A;Title: HIV-1 tropism for mononuclear phagocytes can be determined by regions of gpl A;Reference number: S13288; MUID:91043044; PMID:2172833 A;Accession: S13288; MUID:91043044; PMID:2172833 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-854 <obr> C;Superfamily: type E retrovirus env polyprotein</obr>	RESULT 2 S13288 env protein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Species: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997 C.Accessino. S1328	Qy 1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36 :	Query Match 98.0%; Score 192; DB 2; Length 851; Best Local Similarity 97.2%; Pred. No. 3.2e-15; Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;	submitted to the EMBL Data Library, November 1991 A;Reference number: S33979 A;Accession: S33985 A;Accession: S13985 A;Status: preliminary A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-851 <car> A;Rosidues: 1-851 <car> A;Cross-references: EMBL:Z11530; NID:g60192; PIDN:CAA77628.1; PID:g60199 C;Superfamily: type E retrovirus env polyprotein</car></car>	munodeficiency viru iciency virus type nce_revision 19-Max

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δÃ
                                                                                                                                                                                                                                                         F;31-516/Product: exterior membrane glycoprotein #status predicted <EXT>
F;517-861/Product: transmembrane glycoprotein #status predicted <TMM>
F;517-861/Product: transmembrane glycoprotein #status predicted <TMM>
F;888.136,141.146,161.165,191,202.239,246,267,281,294,300,306,337,344,361,391,397,402,
F;888.136,141.146,161.165,191,202.239,246,267,281,294,300,306,337,344,361,391,397,402,
F;8616,621,630,642,679,755,821/Binding site: carbohydrate (Asn) (covalent) #status pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N; Alternate names:
C; Species: human in
env polypro
N; Alternate
                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R; Wain-Hobson, S.; (
Cell 40, 9-17, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N;Alternate names: coat polyprotein C;Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вb
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                      VCLJSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Title: Nucleotide sequence
A; Reference number: A90866; N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   env polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Accession: A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VCLJLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:M15654; GB:K02008; GB:K02009;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: DNA
A;Residues: 1-856 <RAT>
                                                                                                                                                                                                                                                                                                                           -511/Product: exterior membrane glycoprotein #status predicted <EXIV-
12-856/Product: transmembrane glycoprotein #status predicted <TMM>
;88,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,
;611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre
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                                                                                                                                                                                                       Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Keywords: AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                              psidues: 1-861 <WAI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Accession: A0397
                 polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                               coss-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30/Domain: signal sequence #status predicted
                                                                                                             643
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L.; Haseltine, W.; Patarca,
                                                                                                             YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                  YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF
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35; Conserv
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                 precursor
                                                                                                                                                                                      Conservative
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capsid protein; coat protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sonigo,
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                                                                                                                                                                                                                                                                                                                                                                                                                             GB:K02013; NID:g326417; PIDN:AAB59751.1; PID:g326424
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97.2%;
polyprotein
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P.; Danos,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        e sequence of the AIDS virus,
MUID:85111123; PMID:2578615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MUID:85099333;
                   human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 192;
Pred. No. 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunodeficiency virus
                   immunodeficiency virus
                                                                                                                                                                                                       Score 192;
Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AIDS
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                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Livak, K.J.; Starcich, B. Chang, N.T.; Gallo, R.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cole,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PMID:2981635
                                                                                                                                                                                                       DB 1;
.2e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .2e-15;
                                                                                                             678
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S.; Alizon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        glycoprotein; immunodeficiency;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <SIG>
                                                                                                                                                                                      0;
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                                                                                                                                                                                                                         Length 861;
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                                                                                                                                                                                      Indels
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                   type
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                   1 (isolate
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                                                                                                                                                                                      0,
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                     submitted to the
                                    R; Steuler, H.;
                                                     C; Accession: S21998; S70425
                                                                       C; Species: human immur
A; Variety: isolate 28
C; Date: 20-Feb-1995 #:
                                                                                                           envelope protein gp120/gp41 - human immunodeficiency C; Species: human immunodeficiency virus type 1, HIV-1
                                                                                                                                                                                                                           В
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A;Variety: isolate 27B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вb
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Gurgo,
                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Steuler,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-357 <STE1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Description: Distinct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R; Steuler, H.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: B28922
                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AIDS Res. Hum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: S21994
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Best L
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les 35; Conserv
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                                                                                                                                                                                                                                                                                                                     Similarity
                                      Storch-Hagenlocher, B.; Wildemann, B.;
                 EMBL Data Library,
                                                                         #sequence_revision
populations
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A;Gene: env C;Superfamily: type E retrovirus env polyprotein C;Superfamily: type E retrovirus env polyprotein; glycoprotein; polyprotein; transmembrane p: C;Keywords: capsid protein; coat protein; glycoprotein; polyprotein; transmembrane p: F;1-29yDomain: signal sequence #status predicted <SIC>F;30-861/Product: env polyprotein #status predicted <EPP>F;30-861/Product: env polyprotein #status predicted <EPP>F;87,129,135,140,143,159,163,187,198,234,241,262,276,295,301,302,333,340,356,362,386
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A; Title: Envelope sequences
A; Reference number: A28922;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C:Species: human immunodeficiency virus type 1, A;Note: host Homo sapiens (man) C:Date: 31-Dec-1990 #sequence_revision 31-Dec-19 C:Accession: B28922
                                                                                                                                                                                                                                                                                  A; Residues: 1-140,'X',142-312,'X'
A; Cross-references: EMBL:X61355;
C; Superfamily: type E retrovirus
                                                                                                                                                                                                                                                                                                                                                                                                                 A; Title: Distinct populations of human immunodeficiency A; Reference number: $70417; MUID:92144209; PMID:1736940
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    submitted to the EMBL Data Library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    envelope protein gp120/gp41 - human immunodeficiency virus
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                                                                                                                                                   YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                            YTTLIYTLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                          H.; Storch-Hagenlocher, B.; Wild
dum. Retroviruses 8, 53-59, 1992
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531-536, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Storch-Hagenlocher, B.; Wildemann, B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunodeficiency
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$21990
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97.2%;
                                                                                                                                                                                                                       95.4%;
94.4%;
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                                                                                                                                                                                                                                                                                                         ',314-357 <STE2>
NID:g60179
                                                                                                                                                                                                                                                                                    env polyprotein
                                                                                                                                                                                                                       Pred. No.
                                                                                                                                                                                                                                         Score 187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             virus type 1,
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Pred. No. 5
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of HIV-1
                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wildemann,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-Dec-1990
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6e-15;
es 0;
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  virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                        virus
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type
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July of H

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blood

and Hacke,

cerebrospinal fluid

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dete

20-Feb-1995 #text_change

01-Dec-2000

HIV-1

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A; Note: this virus was isolated C; Genetics:
                          A;Residues: 1-443 <BUR>
A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; PID:g555015
A:Note: this virus was isolated from the mother's sexual partner
                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
C41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus type 1 in 1 A;Reference number: S70417; MUID:92144209; PMID:1736940 A;Accession: S70425
                                                                                                                                                            R; Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A; Title: Evolution of human immunodeficiency virus type 1
A; Reference number: A41621; MUID: 92107924; PMID: 1763038
                                                                                                                                                                                                                                                                                                                    N;Alternate names: coat polyprotein
N;Contains: amino end of coat protein gp41; c
C;Species: human immunodeficiency virus.type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:X61356; NID:g60181; PIDN:CAA43624.1; PID:g1067129 A;Experimental source: patient 27L A;Note: submitted to the EMBL Data Library, July 1991 C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency
A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          envelope protein gp120/gp41 - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change C;Accession: S70422; S21996
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A;Residues: 1-222,'X',224-358 <STE2>
A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1;
                                                                                                                                    A; Reference number: A41621; A; Accession: C41621
                                                                                                                                                                                                                                                                   A;Note: host Homo sapiens (man)
C;Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_Change 26-Aug-1999
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C;Genetics:
A;Gene: env
                                                                                                                A; Molecule type:
                                                                                                                                                                                                                                                       C; Accession: C41621
                                                                                                                                                                                                                                                                                                                                                                                             env polyprotein P - human immunodeficiency virus type 1 (fragment)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTSLIYTLIEQSQNQQEKNEQELLELDKWASLWNWF 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       type: DNA
: 1-357 <ST2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         type E retrovirus
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                                                                                                                DNA
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94.48;
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94.4%;
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Pred. No. 4.8e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 186; DB 2;
Pred. No. 6.3e-15;
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e 1, HIV-1
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                                                                                                                                                                                                                            Nguyen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 357;
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                                                                                                                                                                                  nucleotide sequence
                                                                                                                                                                                                                                 P.N.; Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            type 1 (patient 27L)
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C;Superfamily: type E retrovirus env polyprotein (C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; F;1-251/Product: coat protein gp120 (fragment) #status predicted <GP1> F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2> F;424-443/Domain: transmembrane #status predicted <TMN> F;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding
                                                                                                                                                                                                                                                   R;Pang, S.; VIIICLE, Submitted to the EMBL Data submitted to the EMBL 216673
                                                                                                                                                                                                                                                                                                                      envelope glycoprotein - human immunodeficiency virus type 1 (strain JRFL) C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 24-Nov-199 C;Accession: T09448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C:Keywords: coat protein; glycoprotein; polyprotein: transmembrane protein F;1-29/Domain: signal sequence #status predicted <SIG> F:30-501/Product: coat protein gp120 #status predicted <GP1> F:502-647/Product: coat protein gp41 #status predicted <GP2> F:87,134,140,151,155,183,197,234,241,262,276,289,295,331,338,354,360,390,394,404,447,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Gene: env C;Superfamily: type E retrovirus env polyprotein C;Keywords: coat protein; 9lycoprotein; polyprote;1-29/Domain: signal sequence #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: GB:K03455; GB:m38432; NID:g1906382 C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Date: 30-Sep-1988 #sec
C;Accession: A24774
R;Starcich, B.R.; Hahn,
Cell 45, 637-648, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N;Contains: coat protein gp120; coat protein gp41
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1988 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-856 <S
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                                                                                  A; Gene: env
C; Superfamily:
                                                                                                                                                 A;Cross-references: EMBL:U63632; NID:g1465777; PID:g1465781
                                                                                                                                                                       A; Residues: 1-847 < PAN>
                                                                                                                                                                                         A; Molecule type: DNA
                                                                                                                                                                                                                    A;Status:
                                                                                                                                                                                                                                     A; Accession: T09448
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                    Query Match
Best Local
                                                                                                                               Genetics:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                             preliminary; translated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF
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                      Similarity
                                                                                  type E retrovirus
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  Conservative
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                      93.48;
94.48;
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                                                                                                                                                                                                                                                                                Library,
                                                                                                                                                                                                                                                                                                      Akashi,
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                                                                                  env polyprotein
                                        Score 183;
                                                                                                                                                                                                               from GB/EMBL/DDBJ
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                      Pred.
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                                                                                                                                                                                                                                                                              T.; O'Brien,
, July 1996
Mismatches
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                      No.
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                      8e-14;
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                                                                                                                                                                                                                                                                                                    W.A.;
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                                        Length 847;
                                                                                                                                                                                                                                                                                                    Chen,
  Indels
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YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36

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629

YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF 664

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env protein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
                                                                                                               A; Variety: isolate 3L
C; Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
C; Accession: S22002; S70418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N;Alternate names: coat polyprotein C;Species: human immunodeficiency virus type 1, HIV-1
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R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991 A;Description: Distinct populations of HIV-1 in blood
                                                                                                                                                                                                                                  envelope protein gp120/gp41 - human immunodeficiency virus type C; Species: human immunodeficiency virus type 1, HIV-1
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Nature 313, 450-458,
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A; Residues: 1-847 <OBR>
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A; Residues: 1-856 < MUE>
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A;Accession: A03974
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A;Residues: 1-358 <STE>
A;Cross-references: EMBL:x61351
C;Superfamily: type E retrovirus env polyprotein
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                                                                                                                                                                                                                                                                                                                             R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991
                                                                                                                                                                                                                                                                                                                                                                         C; Accession: S22000
                                                                                                                                                                                                                                                                                                                                                                                        C; Species: human immunodeficiency virus C; Date: 20-Feb-1995 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                                          envelope protein gp120/gp41 - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 12-Apr-1995
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A; Residues: 1-333, 'X', 335-358 <STE2>
A; Cross-references: EMBL: X61352; NID
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A; Residues: 1-358 <STE1>
A; Cross-references: EMBL: X61352; NID: g60186; PIDN: CAA43616.1; PID: g60187
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A; Accession: S22002
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Pred. No. 2.5e-14;
2; Mismatches 1
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Pred. No. 2.5e-14;
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Signal. SigNaL CHAIN CHAIN CHAIN DISULFID DISULFID DISULFID DISULFID DISULFID DISULFID DISULFID DISULFID DISULFID CARBOHYD	This SWISS-PROT entry in the Swiss Instantial the European Bioinformation of the European Bioinformation of the European Bioinformation on this state and this state and this requires a lice or send an email to lice or send an email to lice EMBL; K02011; AAA44661. HIV; K02011; ENV\$H86. GlycoSuiteDB; P04582: InterPro; IPR000328; En InterPro; IPR000777; GPP pfam; PF00516; GP41; 1. Pfam; PF00517; GP41; 1. AIDS; Coat protein; Pol	Viruses; Retroid V Viruses; Retroid V VIRUSES; Retroid V (1) (1) (1) SEQUENCE FROM N.A. MEDLINE=85111123; Ratner L., Haselti Josephs S. F., Dora Baumeister K., Iva Lautenberger J.A., Wong-Staal F.; "Complete nucleoti	RESULT 1 ENV_HV1B8 ENV_HV1B8 ENV_FV1B8 AC P04.582; DT 13-AUG-1987 DT 15-JUL-1987 DT 15-JUL-1999 DE Envelope pol. DE glycoprotein DE glycoprotein DE GNENV.
1 30 31 506 54 851 119 205 1126 196 131 157 218 247 228 239 226 331 378 440 388 440 136 136	This SWISS-PROT entry is copyright. I between the Swiss Institute of Bioin the European Bioinformatics Institute use by non-profit institutions as modified and this statement is not reentities requires a license agreement or send an email to license@isb-sib.c.EMBL; K02011; EAN444661.1;	71. Sept. 501. Sept. 5	T 1 V1B8 STANDARD; PRT; P04582; P04582; 13-AUG-1987 (Rel. 05, Created) 13-AUG-1987 (Rel. 05, Last sequence 15-JUL-1999 (Rel. 38, Last annotation Envelope polyprotein GP160 precursor glycoprotein (GP120); Transmembrane ENV.
EXTERIOR MEMBRANE GLYCOPROTEIN. TRANSMEMBRANE GLYCOPROTEIN. BY SIMILARITY.	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch). EMBL; K02011; AAA44661.1; HIV; K02011; ENV\$BH8.: GlycosuiteDB; P04582: InterPro; IPR000328; Env_GP41. InterPro; IPR000328; Env_GP41. Pfam; PF00517; GP120. 1 Pfam; PF00517; GP41: 1. Pfam; PF00517; GP41: 1.	e; Lentivirus. Livak K.J., Starcich B.R., A., Whitehorn E.A., b.J., Chang N.T., Gallo R.C., b.J., Chang N.T., Gallo R.C.,	AA. te) date) ntains: Ex oprotein (

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Gregory T.J.;
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MEDLINE-85111123; PubMed-2578615;

MEDLINE-85111123; PubMed-2578615;

Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich Ratner L., Haseltine W., Rafalski J.A., Whitehorn E.A., Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A., Baumeister K., Ivanoff L., Petteway S.R. Jr., Pearson M.L. Baumeister K., Ivanoff L., Petteway S.R. Jr., Chang N.T., Gallautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Gallautenberger J., Chang N.T., Ga
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21-JUL-1986 (Rel. 01, Last seq.
11-JUL-1999 (Rel. 38, Last ann.
Envelope polyprotein GP160 pre
glycoprotein (GP120); Transmem
                                            "Assignment of intrachain disulfide bonds and characterization potential glycosylation sites of the type I recombinant human immunodeficiency virus envelope glycoprotein (gpl20) expressed Chinese hamster ovary cells.;
J. Biol. Chem. 265:10373-10382(1990).
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NCBI_TaxID=11678;
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llman M.W., Ridd
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MEDLINE=87299196; PubMed=3040055;
Ratner L., Fisher A., Jagodzinski
Gallo R.C., Wong-Staal F.;
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15-JUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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es; Retroviridae; Lentivirus.
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HIV; I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Crowl R., Ganguly K., Gordon M., Conroy R., Shaw G.M., Wong-Staal F., Reddy E.P.; "HTLV-III env gene products synthesized in antibodies present in the sera of AIDS paticell 41:979-986(1985).
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10-FEB-1996 (Rel. 33, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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NCBI_TaxID=11707;
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rPro; IPR000328; Env_GP41.
rPro; IPR000777; GP120.
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PF00517;
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IPR000777; GP120.

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Q70626:
15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP41)].
           GlycoSuiteDB;
                     EMBL; U12055;
                                                  entities
                                                            modified
                                                                                                                   SEQUENCE FROM N.A.

MEDLINE-95127297; PubMed-7826699;
MEDLINE-95127297; PubMed-7826699;
Meitz M.S. Jr., Hall L., Robert-Guroff M., Lauto
Shaw G.M., Kong L.I., Weiss S.H., Waters D., Ga.

"Viral variability and serum antibody response infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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  InterPro;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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                                     s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way ified and this statement is not removed. Usage by and for commercial ities requires a license agreement (See http://www.isb-sib.ch/announce/send an email to license@isb-sib.ch).
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RESULT 6
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OS Human
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Matches 35
Human immunodeficiency v
Viruses; Retroid viruses
NCBI_TaxID=11886;
[1]
                                                                                       21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: glycoprotein (GP120); Transmembrane glycoprotein ENV.
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P03377;
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21-JUL-1986
15-JUL-1999
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Pfam; PF00517; GP41;
AIDS; Coat protein; Po
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EMBL; A04321; CAA00352.1; -.
PIR; A03975; VCLJLV.
HTV; K02013; EMV$BRU.
InterPro; IPR000728; Env_GP41.
InterPro; IPR000777; GP120.
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"Nucleotide sequence
Cell 40:9-17(1985).
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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: Egycoprotein (GP120); Transmembrane glycoprotein
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Gurgo C., Guo H.-G., Franchini G., Aldovini A., Collalti E.,
Farrell K., Wong-Staal F., Gallo R.C., Reitz M.S. Jr.;
"Envelope sequences of two new United States HIV-1 isolates.";
Virology 164:531-536(1988).
-i- MISCELLANEOUS: THE SC ISOLATE WAS TAKEN FROM AN ARC PATIENT
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HIV; M17450;
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Viruses; Retroid viruse
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                                                                                                            InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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Viruses; Retroid viruses; Ret
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T 01-FEB-1991 (Rel. 17, Last sequence update)

DT 16-OCT-2001 (Rel. 40, Last annotation update)

Envelope polyprotein GP160 precursor [Contains: Ext

Envelope polyprotein (GP120); Transmembrane glycoprotein (
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MEDLINB=90317906; PubMed=2370688;
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York-Higgins D., Cheng-Mayer C., Bauer
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DT 01-FEB-1991 (Rel. 17, Created)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP41)].
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MEDLINE-90347835; PubMed-2384920;

MEDLINE-90347835; PubMed-2384920;

Cheng-Mayer C., Quiroga M., Tung J.W., Dina D., Levy J.;

"Viral determinants of human immunodeficiency virus type

"Viral determinants orthopathogenicity, and CD4 antigen mc
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RESULT
ENV_HVJ
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InterPro: IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotei
                                                                                                                                                                                                                                                                                                              MEDLINE-86218077; PubMed=2423250;
Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D., Modrow S., W.
Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Wong-Staal F.
"Identification and characterization of conserved and variable
regions in the envelope gene of HTLV-III/LAV, the retrovirus of
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Viruses; Retroid viruses;
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                                                                                                                                                                                                                                                                                                     45:637-648(1986)
                                                                                                                                                                                                                                                                                                                                                                                  .993 (Rel. 26, Created)
993 (Rel. 26, Last sequence update)
9993 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation (Contains: I
901/protein GP160 precursor (Contains: I
                                                                                                                                                                                                                                              protein; Polyprotein;
STANDARD;
virus type 1 (WMJ1 isolate) (HIV-1).
es; Retroviridae; Lentivirus.
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RESULT 12
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EMBL; X01762;
PIR; A03974; V
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21-JUL-1986 (Rel.
15-JUL-1999 (Rel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Muesing M.A., Capon D.J.;
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InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PF00516; GP120; PF00517; GP41;
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999 (Rel. 38, Last annotation update)
991 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains: I
tein (GP120); Transmembrane glycoprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein;
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CAA25903.1;
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  97526 MW;
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                                                                                               EXTERIOR MEMBRANE GLYCOPROTEIN.

TRANSMEMBRANE GLYCOPROTEIN.

BY SIMILARITY.

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                                                              N-LINKED
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RESULT 13
ENV_HV1J3
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AC P124E
AC P124E
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    Pfam; PF00516; GP120; 1

    Pfam; PF00517; GP41; 1.

    AIDS; Coat protein; Pol

    Signal.
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    1

    CHAIN
    31

    SIGNAL
    36

    CHAIN
    517

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01-OCT-1989
15-JUL-1999
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01-OCT-1989 (Rel. 12, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains glycoprotein (GP120); Transmembrane glycoprote
   DISULFID
                                                                                                                                                             the
                                                                                                                                                                             This
                                                                                                                                                                                            Komiyama N., Hattori N., Inoue J., Sakuma S. "Nucleotide sequences of gag and env genes of HIV-1 and their expression in bacteria."; AIDS Res. Hum. Retroviruses 5:411-419(1989).
                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE=89352108; PubMed=2669897;
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NCBI_TaxID=11694;
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                                                                                   InterPro;
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                                                                                                                              European Bioinformatics Institute. The by non-profit institutions as long ified and this statement is not removed ittes requires a license agreement (See
                                                                          M21138; ENV$JH3.
erPro; IPR000328; Env_GP41.
erPro; IPR000777; GP120.
                                                                                                                                                                    SWISS-PROT entry is copyright. It is produced through sen the Swiss Institute of Bioinformatics and the EN
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856
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                                              Polyprotein;
                                                                                                                              license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                    GP160 precursor [Contains:
   Transmembrane glycoprotein
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EXTERIOR MEMBRANE GLYCOPROTEIN.
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                                              Glycoprotein;
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No. 5.
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                                              Transmembrane;
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                                                                                                                                                                                                                  Japanese isolate
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RESULT 14
ENV_HV1A2
ID ENV_H
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Best Local S
Matches 34
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P03378;
21-JUL-1986
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                                   SEQUENCE FROM N.A.
MEDLINE-85090453; PubMed-2578227;
MEDLINE-85090453; PubMed-2578227;
Sanchez-Pescador R., Power M.D., E
Stemplen M.M., Brown-Shimer S.L.,
Stemplen M.M., Dina D., Luciw P.A.;
Devy J.A., Dina D., Luciw P.A.;
                                                                                                          21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GPI60 precursor [Contains: glycoprotein (GP120); Transmembrane glycoprotein
                                                                                     Human immunodeficiency
Viruses; Retroid virus
                                                                                                      ENV
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               Science 227:484-492(1985).
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                      "Nucleotide
(ARV-2).";
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                                                                                                                                                                                          YTSLIYTLIEESQNQQEKNEQELLGLDKWASLWNWF
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  SWISS-PROT
                                                                                                                                                                                                                              Similarity
                             sequence
                                                                                                                                                                                                                                                           423
460
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                                                                                                                                                                                                                       Conservative
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                                                                                                                                                       STANDARD;
entry is
                                                                                      viruses;
                                                                                                                                                                                                                                                                          98399
                             and
                                                                                                                                                                                                                              93.4%;
                                                                                     virus type 1 (ARV2/SF2 isolate) (HIV-1).
es; Retroviridae; Lentivirus.
copyright.
                             expression
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Pred. No. 5.7e
1; Mismatches
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MEDLINE-86235450; PubMed-3012778;
Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R. Salahuddin S.Z., Wong-Staal F., Gallo R.C., Par Salahuddin S.Z., Wong-Staal F., Gallo R.C., Par "Genetic variation in HTLV-III/LAV over time in at risk for AIDS.";
science 232:1548-1553(1986).

-!- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND WMJ BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A TWO WAS PERINATALLY INFECTED BY HER MOTHER.
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polyprotein GP160 precursor [Contains: Followers]
tein (GP120); Transmembrane glycoprotein
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Listing first 45 summaries
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1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
. 1	192	98.0	645	<u>д</u> .	Q993A6	Q993a6
2	192	98.0		15	Q70607	270607
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4	192	98.0		15	Q70604	. Q70604
_U	. 192	98.0		15	Q70605	Q70605
6	192	98.0		15	Q70608	270608
7	192	98.0		15	Q78243	Q78243
8	192	98.0		15	Q89797	Q89797 human
9	192	98.0		15	Q85582	
10	192	98.0		15	Q72502	Q72502
11	192	98.0		15	092877	092877 simian-huma
12	192	98.0		15	. 074599	
13	192	98.0		15	Q74090	Q 74 090
14	190	96.9		15	Q69910	269910
15	190	96.9		15	041556	041556
16	190	96.9		15	077368	077368

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ALIGNMENTS

RESULT 1

	1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36 :	Оy
Gaps	Query Match 98.0%; Score 192; DB 15; Length 645; Best Local Similarity 97.2%; Pred. No. 2.1e-15; Matches 35; Conservative 1; Mismatches 0; Indels 0;	Que Bes
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	AF321	DR
	Proc. Natl. Acad. Sci. U.S.A. 98:4587-4592(2001).	RE P
1gen	HIV envelope glycoprotein suggests structural influences on antigen	7 K
s of	tspots to exposed st	RT
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	Surman S., Lockey T.D., Slobod K.S., Jones B., Riberdy J.M.,	RA
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	Human immunodeficiency virus type 1.	SO
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'STRAIN-LM87-1;

MEDLINE-95127297; PubMed-7826699;

Reitz M., Hall L., Robert-Guroff M., Lautenberger Reitz M., Gallo R., E Waters D., Gallo R., E Shaw G., Kong L., Weiss S., Waters D., Gallo R., E "Viral variability and serum antibody response in infected with HIV type 1 (HTLV type IIIB).";

AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
Submitted (JUL-1994) to EMBL; U12032; AAA76668.1
                                                                            Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B., Shaw G., Kong L., Welss S., Watters D., Gallo R., Blattner W.; "Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB)."; ALDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
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                                         Human immunodeficiency virus type
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                                                                                                                                                                                                                                                       Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases EMBL; U12035; AAA76670.1; -. InterPro; IPR000328; Env_GP41. InterPro; IPR000777; GP120.
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Verani P.,
MEDLINE=95127297; PubMed=7826699; Reitz M., Hall L., Robert-Guroff M. Shaw G., Kong L., Weiss S., Waters "Viral variability and serum antibo
                                                                                                                                                 Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                                                                                                    ENV
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chronically infected HUT-78 cellular clone.
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EMBL; z11530; CAA77628.1
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PF00517; GP41;
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P., Rossi G.B.;
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Lautenberger J., Hahn B.
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                                                                                                                                                                                                                                                                                                                                                                              Buckler C.
Submitted
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Viruses; Retroid viruses; Retroviridae;
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AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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EMBL; M19921; AAA44992.1;

InterPro; IPR000328; Env_GP41.

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J. Virol. 59:284-2
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retrovirus in human and
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MEDLINE-92219406; PubMed-1373204;
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854 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PubMed=3016298;
man H.E., Koenig
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                                                               Glycoprotein; Polyprotein; Transmembrane 97124 MW; ABAOA1BF36D5595A CRC64;
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Last annotation updat
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Pred.
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  192;
No. 2.
                                                                                                                                                                                                                                                         Ennis F.A.; virus type 1 at amino acid 585 CD8+ A24-restricted cytotoxic 1
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.8e-15;
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      DB 15;
.8e-15;
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databases.
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                        Length 854;
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Best Local
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                                                                                                                                                                092877;
01-NOV-1998
01-NOV-1998
01-DEC-2001
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CONFLICT
CONFLICT
SEQUENCE
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pfam; pF00517; GP41; 1
AIDS; Coat prote:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
NCBI_TaxID=11676;
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01-NOV-1996 (TrEMBLrel.
01-NOV-1996 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Salminen M.O., Koch C., Sanders-Buell E., Ehrenberg
Michael N.L., Carr J.K., Burke D.S., McCutchan F.S.
"Recovery of virtually full-length HIV-1 provirus
from primary virus cultures using the polymerase ch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENV polyprotein.
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                                                                                                                          ENV
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Martin M.A.;
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SEQUENCE FROM N.A. MEDLINE=99098984;
                                                                                                                                                                                                                                                    092877
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InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             molecular clone.";
J. Virol. 59:284-291(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      retrovirus in human and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 from primary virus cultures using Virology 213:80-86(1995).
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                                                         Viruses; Retroid
NCBI_TaxID=57667;
                                                                                                         Simian-Human immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; U26942; AAB60578.1;
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                                                                                                                                                                                                                                                                                                                                                       Coat protein; Glycoprotein; Polyprotein; Transmembrane.
ICT 214 214 H -> L (IN REF. 2).
ICT 530 530 A -> S (IN REF. 2).
ICT 739 739 G -> D (IN REF. 2).
NCE 854 AA; 97005 MW; FF2264B3841D1220 CRC64;
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35; Conserv
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                                                                                   viruses;
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    PubMed=9882298;
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97.2%;
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                                                                                     ency virus.
Retroviridae;
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pred. No. 2
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?.8e-15;
                                                                                        Lentivirus
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in reaction.";
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Matches 35
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Q74599;
Q1-NOV-1996
                                                                                                                                  Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases EMBL; D86068; BAA12995.1; -. InterPro; IPR000328; Env_GP41. InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Changes in human immunodeficiency virus type 1 envelope glycoproteins responsible for the pathogenicity of a multiply passaged simian-human immunodeficiency virus (SHIV-HXBc2).";
J. Virol. 73:976-984(1999).
                                                                                                                                                                                            STRAIN-MCK1;
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NCBI_TaxID=11676;
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Halloran M., Axthelm M.W.,
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Sodroski J.G.;
"Changes in human
                                                                                          SEQUENCE
                                                                                                               Pfam; PF00516; GP120; 1. Pfam; PF00517; GP41; 1.
                                                                                                                                                                                    Iwatani Y.;
                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                              (HIV-1) Isolates.";
Virology 174:103-116(1990).
                                                                                                                                                                                                                                                                           MEDLINE=90101366; PubMed=1688473;
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Steenbeke T., Halloran M., F
                                                                                                                                                                                                                                     Spectrum of Biólogical Properties
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                      YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                   Coat
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856 AA;
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A
                                                                                        Glycoprotein; Polyprotein; 97287 MW; 238042A234C56685
                                                      98.0%;
97.2%;
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97.2%;
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19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , Etemad-Moghadam B., Hofmann Letvin N.L., Sodroski J.G.;
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                                                      Score 192;
Pred. No. 2.
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                                             Mismatches
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RESULT Q74090

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RESULT 14
Q69910
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01-DEC-2001
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01-NOV-1996
01-DEC-2001
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                      Conley A.J., Kessler J.A., Boots L.J., Tung J.S., Arnold E Keller P.M., Shaw A.R., Emini E.A.; "Neutralization of divergent human immunodeficiency virus variants and primary isolates by IAM-41-2F5, an anti-gp41 monoclonal antibody.";
                                                                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type
Viruses; Retroid viruses; Retrovir
NCBI_TaxID=11676;
[1]
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Q69910;
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Q74090;
                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 91:3348-3352(1994).
EMBL: U06740, AAA19153.1; -.
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"Spectrum of Biological Properties
(HIV-1) Isolates.";
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Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
                                                                                                                                                            InterPro; IPR000328; Env_GP41.
Pfam; PF00517; GP41; 1.
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                                                                                                                                           Transmembrane.
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; PF00517; GP41; 1
; Coat protein; G1
ENCE 856 AA; 97
    35;
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                       Similarity
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                                                                                  42 AA;
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                                                                                  5248 MW;
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97396 MW; FE3E784C423C108C
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97.2%;
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Pred. No. 2.8e-15;
1; Mismatches 0;
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Score 190; DB 15;
Pred. No. 2.3e-16;
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RESULT 15
041556
ID 04155
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Search completed: May 16, 2003, 11:19:49 time : 26.3124 secs
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Best Local Similarity
Matches 35; Conserv
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J. Virol. 72:1552-1576(1998).
EMBL: U84814; AAC58844.1; -.
InterPro; IPRO00328; Env_GP41.
InterPro; IPRO00777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP120; 1.
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041556;
01-JAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Envelope glycoprotein (Fragment).
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Connor R.I., Korber B.T.M., Graham B.S., Hahn B.H., Ho D.D., Walker B.D., Neumann A.U., Vermund S.H., Mestecky J., Jackson S., Fenamore E., Cao Y., Gao F., Kalams S., Kunstman K.J., McDonald D., McWilliams N., Trkola A., Moore J.P., Wolinsky S.M.; "Immunological and virological analyses of persons infected by human immunodeficiency virus type 1 while participating in trials of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. STRAIN=C17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID-11676;
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                                                                                                                                                                                                                                                                                              AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
                                                                                   841 AA; 95802 MW; AAFC104893D91667 CRC64;
                                                                                                                                                                      Conservative
                                                                                                                                                                                            96.9%; Score 190; DB 15; Length 841; 97.2%; Pred. No. 4.9e-15;
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Maximum Match 100%
Listing first 45 summaries
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US-08-452-264A-1
US-08-485-264A-1
US-09-082-279B-15
US-09-082-279B-63
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US-09-082-279B-63
US-09-082-279B-63
US-09-082-279B-63
US-09-082-279B-63
US-09-082-279B-631
US-09-082-279B-105
US-09-082-279B-1121
US-09-082-279B-1111
US-09-082-279B-1161
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US-08-484-223B-1
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                                                                      497, App
498, App
603, App
630, App
631, App
631, App
705, App
1076, Ap
1121, Ap
1161, Ap
116
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45	44	43	42	41	40	39	38	37	36	35 5	34	33	32	31	30	29	28
192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
98.0	98.0	98.0	98.0	98.0	98.0			98.0		98.0				98.0		98.0	98.0
37	37	36	ω 6	36	36	36	36	36	36	36	36	36	36	36	36	36	36
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
US-09-082-279B-775	US-09-082-279B-771	US-08-255-208A-1	US-09-315-304B-1486	US-09-315-304B-1470	US-09-315-304B-1469	US-09-315-304B-1161	US-09-315-304B-1121	-09-315	US-09-315-304B-834	US-09-315-304B-705	US-09-315-304B-631	US-09-315-304B-630	US-09-315-304B-603	US-09-315-304B-498	US-09-315-304B-497	US-09-315-304B-15	US-08-474-349A-413
Sequence 775, App	Sequence 771, App	Sequence 1, Appli	`	Sequence 1470, Ap	•	Sequence 1161, Ap	Sequence 1121, Ap	6,	•	Sequence 705, App	`	`	`	`	Sequence 497, App	~	Sequence 413, App

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RESULT 1
US-08-073-028-1
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GENERAL INFORMATION:
     Matches
                                      Query Match
                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                 TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/073,028
FILING DATE: 07-JUN-193
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Bolognesi, Dani F
APPLICANT: Matthews, Thomas
APPLICANT: Wild, Carl T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                               NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: New York
STATE: New York
                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
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                     Local
                                                                                                                                                              LENGTH:
     l Similarity
35; Conser
                                                                                                                                      amino acid
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                                                                                                                                                          36 amino acids
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   Conservative
                                                                                                       SS: single unknown
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                    98.0%;
97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Edmonds
                                                                                                                                                                                                                                                                                    7872-004-999
Score 192; DB 1;
Pred. No. 9.6e-18;
1; Mismatches 0,
                                  Length 36;
   Indels
   0;
   Gaps
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1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36

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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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RESULT 3
US-09-071-877-1
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                                                                                                                                           Sequence 1, Application US/09071877 Patent No. 6015881
                                                                                                                             GENERAL
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                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: un
MOLECULE TYPE:
08-486-099-1
         APPLICANT: Mader, Catherine
APPLICANT: Merutka, Gene
APPLICANT: METHODS AND COMPOSITIONS FOR PEPTIDE SYNTHESIS
                                                                                  APPLICANT: Kang, Myung-Chol
APPLICANT: Bray, Brian
                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: 1:
 FILE REFERENCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: COTUZZÍ, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78;
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/486,099 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
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                                                                                                                                                                                                                                                                          1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                          INFORMATION:
                                                                                                                                                                                                                                                      YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                  Lichty, Maynard
Mader, Catherine
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VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS
VENTION: B VIRUS TRANSMISSION
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Lambert, Dennis M.
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7872-050
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Pred. No. 9.6e-18;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                               Length 36;
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                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/071,877
CURRENT FILING DATE: 1998-05-01
NUMBER OF SEQ ID NOS: 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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TYPE: PRT
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                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
TITLE OF INVENTION:
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                                                                                                                                                                     TELEFAX: (212,
TELEFAX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                           FILING DATE: 20
CLASSIFICATION:
                 Local
                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                  TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/0 FILING DATE: 20-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 10036-2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
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les 35; Conserv
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                                                                                                                                       LENGTH:
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                 Similarity
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                                                                                                                         amino acid
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                                                                                                                                                                                                                                                                           Coruzzi, Laura
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1155 Avenue of the Americas
                                                                                                                                         36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
Conservative
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Langlois, Alphonse :
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                                                                                            unknown
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                                                                         peptide
               98.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98.0%;
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                                                                                                                                                                                                                                                                                                                                          US/08/360,107A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Edmonds
                                                                                                                                                                                                                                                               30,742
                                                                                                                                                                                                                                                  7872-013
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Pred. No. 9.6e-18;
1; Mismatches 0;
              Score 192; DB 3;
Pred. No. 9.6e-18;
 Mismatches
                                                                                                                                                                                                                                                                                                                                                                        Version #1.30
                              Length 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
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 Gaps
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1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36

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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

US-08-484-223B-1

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                                                                                                                                                           RESULT 6
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                                                                                  Patent No. 6054265

Patent No. 6054265

GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                      Query Match
Best Local :
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                                                                                                                                                                                                                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Petteway,
APPLICANT: Langlois,
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 10036-2711

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 78 TELECOMMUNICATION INFORMATION:
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
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(212) 869-9741/8864
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Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
VENTION: TRANSMISSION
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                                              Bolognesi, Dani P. Matthews, Thomas J. Wild, Carl T.
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              Barney, Shawn O.
Lambert, Dennis M.
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Petteway, Stephen R
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97.2%;
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                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                       0;
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Best Local Similarity 97.2
                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/08475668A Patent No. 6060065
                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                 APPLICANT: Petteway, Stephen R. TITLE OF INVENTION: COMPOSITION TITLE OF INVENTION: FUSION-ASSOTITILE OF INVENTION: TRANSMISSIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 78 TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura A.
REGISTRATION NUMBER: 30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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TITLE OF INVENTION:
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PRIOR APPLICATION DATA:
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                                                                                                    CITY: New York
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Lambert, Dennis M.
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(212) 869-9741/8864
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97.2%;
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                                                                                                                    Edmonds LLP of the Americas
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Pred. No. 9.6e-18;
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OPERATING SYSTEM:

PC-DOS/MS-DOS

CURRENT APPLICATION DATA:

SOFTWARE:

PatentIn Release #1.0, Version

US/08/475,668A

APPLICATION NUMBER: US/O FILING DATE: 07-JUN-1995

CLASSIFICATION:

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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino
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INFORMATION FOR SEQ
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                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                TELECOMMUNICATION INFORMATION:
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                                                                                                                                              APPLICATION NUMBER: US/08/485,551A FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
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OPERATING SYSTEM:
SOFTWARE: Patenti
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                                                                                            NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742
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STATE: New York
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                                                                                   REFERENCE/DOCKET NUMBER:
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(212) 869-9741/8864
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Lambert, Dennis M.
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SYSTEM: PC-DOS/MS-DOS
Patentin Release #1.0, Version #1.30
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                 PENNIE
ID NO:
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97.2%;
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Pred. No. 9.6e-18;
"'Amatches 0;
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Best Local Similarity
Thes 35; Conserve
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US-08-471-913A-1
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                                             Matches
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TOPOLOGY: unl
MOLECULE TYPE:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE
TITLE OF INVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING EPS:
TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                      SEQUENCE CHARACTERISTICS LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                   LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RY: USA
10036-2711
                                                           Similarity
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                                                                                                                                                                                                                                                                                                      amino acid
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                                                                                                                                                                                                                                                (212) 869-9741/8864
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                                                                                                                                                                                                                                                               (212) 790-9090
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97.2%;
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97.2%;
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                                                           Score 192; DB 3; Pred. No. 9.6e-18;
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Pred. No. 9.6e-18;
                                           Mismatches
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                                                                        Length 36;
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                                             Indels
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RESULT 10 US-08-554-616-1

Sequence Patent No.

Application US/08554616

GENERAL INFORMATION:

Bolognesi, Dani P. Matthews, Thomas J. Wild, Carl T.

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                                                                                                                                                                                         Sequence 1, Application Patent No. 6228983
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/554,616
FILING DATE: 06-NOV-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/073,028
FILING DATE: 07-JUN-1993
                                                                   APPLICANT:
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TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
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ATTORNEY/AGENT INFORMATION:
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CURRENT APPLICATION DATA:
                                                                                                       APPLICANT:
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APPLICANT: Wild, Carl T.
TITLE OF INVENTION: SYNTHETIC PER
TITLE OF INVENTION: TRANSMISSION
                    TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                    FITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
TOPOLOGY: un
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OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: New York
STATE: New York
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Petteway, Stephen R.
Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
VENTION: RESPIRATORY SYNCYTIAL VIRUS TRANSMISSION
EQUENCES: 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                      Barney, Shawn O.
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                                                                                                     Lambert, Dennis M.
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97.2%;
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Pred. No. 9.6e-18;
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SEQ ID NO 15
LENGTH: 36
TYPE: PRT
                  Query Match
Best Local
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
CURRENT APPLICATION UNMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15, Application US/09082279B Patent No. 6258782
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Best Local Similarity
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                                                                                                                   ORGANISM: Artificial Sequence
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                                                                                 OTHER INFORMATION: Core polypeptide
                                                                                                      FEATURE:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Rel CURRENT APPLICATION DATA:
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TELEFAX: (214,
TELEFAX: 66141 PENNIE
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 Local Similarity
les 35; Conserv
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Guthrie, Kelly
Merutka, Gene
                                                                                                                                                                                        FastSEQ for Windows Version 3.0
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 Conservative
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                98.0%;
97.2%;
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97.2%;
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Pred. No. 9.6e-18;
"" matches 0;
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Score 192; DB 4;
Pred. No. 9.6e-18;
1; Mismatches 0
                              Length 36;
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Gaps
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1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36

В

1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version
Of ID NO 497
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Core polypeptide
US-09-082-2798-497
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: Sequence 497, Application US/09082279B

: Patent No. 6258782
RESULT 15
US-09-082-279B-603
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; Sequence 498, Application US/09082279B
; Patent No. 6258782
                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 498
LENGTH: 36
                                                                                                                                               Matches
                                                                                                                                                               Best Local Similarity
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Best Local Similarity
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
RITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT EILING DATE: 1998-05-20
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                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                       1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                          1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Guthrie, Kelly
Merutka, Gene
Anwer, Mohmed
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Merutka, Gene
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97.2%;
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97.2%;
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Pred. No. 9.6e-18;
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Pred. No. 9.6e-18;
                                                                                                                                               Mismatches
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APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 603
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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                                 QΥ
                                                                                                                                  ; OTHER INFORMATION: Core polypeptide US-09-082-279B-603
                                                                  Matches
                                                                                  Query Match
Best Local :
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                                                                 Local Similarity 97.2
mes 35; Conservative
1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        Guthrie, Kelly
Merutka, Gene
Anwer, Mohmed
                                                                                                                                                                                                                                                                                                                                                                                                                                            Barney, Shawn
                                                                                  98.0%;
97.2%;
                                                                                  Score 192; DB 4;
Pred. No. 9.6e-18;
                                                                  Mismatches
                                                                                                Length 36;
                                                                  Indels
                                                                  0;
                                                                  Gaps
```

Search completed: May 16, 2003, 11:22:14
Job time: 11.1928 secs

0;

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        al number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      May 16, 2003, 11:20:00; Search time 15.759 Seconds (without alignments) 220.333 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      362588 seqs, 96450795 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-623-533A-540
196
                                                                                                                                                                                                                                                                                                                                                                                                            Published_Applications_AA: *
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/cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
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/cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
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/cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
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/Cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*
/Cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
/Cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. derived by analysis of the total score distribution.

SUMMARIES

Result

1						
H	192	98.0	36	9	US-09-874-475-16	Sequence 16, Appl
2	192	98.0	36	9	US-10-116-797-1	1, 1
ω	192	98.0	36	9	193-346	μ,
4	192	98.0	36	10	US-09-796-202-10	Sequence 10, Appl
Մ	192	98.0	36	10	US-09-779-451-5	51 'A
σ	192	98.0	36	10	US-09-834-628-1	۲.
7	192	98.0	36	10	US-09-854-816-1	Sequence 1, Appli
8	192	98.0	36	10	US-09-854-816-108	Sequence 108, App
9	192	98.0	37	9	US-09-848-616-176	176, A
10	192	98.0	46	10	US-09-779-451-41	41,
11	192	98.0	56	10	US-09-779-451-4	
12	192	98.0	177	9	US-10-040-349B-2	∧
13	192	98.0	221	9	US-10-059-271-84	
14	192	98.0	232	Ø	US-10-059-271-81	Sequence 81, Appl
15	192	98.0	254	9	US-10-059-271-82	
16	192	98.0	256	Q	US-10-059-271-97	`
17	192	98.0	268	10	US-09-854-816-16	e 16,
.18	192	98.0	268	10	US-09-854-816-17	
19	192	98.0	268	10	US-09-854-816-18.	Sequence 18, Appl

45	44	43	. 42	41	40	39	38	37	36	35	34	33	32	31	30	. 29	28	27	26	. 25	24	23	22	. 21	2
185	186	186	186	186	186	186	. 187	187	187	187	188	189	189	190	190	192	192	192	192	192	192	192	192	192	76T
94.4	94.9	94.9		94.9		94.9	95.4	95.4		95.4		96.4	96.4	96.9	96.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
233	1231	269	269	268	267	46	847	646	619	268	269	268	36	269	268	1186	1101	861	856	853	519	391	345	345	344
10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	10	9	10	9	10	9	٧
US-09-854-816-50	US-10-059-271-94	US-09-854-816-42	US-09-854-816-6	US-09-854-816-41	US-09-854-816-38	US-09-854-816-109	US-09-476-242-2	US-09-891-609-2	US-09-891-609-4	. US-09-854-816-26	US-09-854-816-28	US-09-854-816-19	US-09-912-824-1	US-09-854-816-12	US-09-854-816-9	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	US-10-040-349B-1
50	Sequence 94, Appl	42	Sequence 6, Appli	Sequence 41, Appl	Sequence 38, Appl		2		Sequence 4, Appli		28		ш,	Sequence 12, Appl	Sequence 9, Appli	55,	Sequence 53, Appl	103		33,	•		Sequence 8, Appli	Sequence 49, Appl	Sequence 1, Appli

ALIGNMENTS

RESULT 1 US-09-874-475-16

GENERAL INFORMATION:

APPLICANT: Petropoulos, Christos J.
APPLICANT: parkin, Neil T.
APPLICANT: Whitcomb, Jeanette
APPLICANT: Huang, Wei

Huang, Wei

Sequence 16, Application US/09874475 Publication No. US20020182592A1

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                                                                                                                                                                                            RESULT 2
US-10-116-797-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Fusion Inhibitor Peptide US-09-874-475-16
                                                                                                                              Sequence 1, Application US/10116797 Publication No. US20030044411A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 16
APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING HIV-1 INFECTION
FILE REFERENCE: 64672-A
CURRENT APPLICATION NUMBER: US/10/116,797
CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEO ID NOS: 16
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS FILE REFERENCE: 2793/65166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                  Match 98.0%;
Local Similarity 97.2%;
                                                                                                                                                                                                                                                                          1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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5.
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Pred. No. 1.3e-16;
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; OTHER INFORMATION: T-20 US-09-796-202-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: PRT; ORGANISM: Homo sapiens
US-10-116-797-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide
US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-493-346-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/493,346
CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 97.2
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Best Local Similarity
Matches 35; Conserv
Query Match
Best Local Similarity
                                                                                                                                                                             SEQ ID NO 10
LENGTH: 36
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                               APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                            Patent No.
                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Olson, William C APPLICANT: Maddon, Paul J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             equence 1, Application US/09493346 blication No. US20030082185A1 ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                           equence 10, Application US/09796202 atent No. US20020068813A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 61009
                                                                                      NAME/KEY: PEPTIDE LOCATION: (1)..(36)
                                                                                                                           FEATURE:
                                                                                                                                            ORGANISM: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                9-796-202-10
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TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
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97.2%;
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97.2%;
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Pred. No. 1.3e-16;
 Score
Pred.
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Pred. No. 1.3e-16;
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 192; DB 10;
No. 1.3e-16;
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                                                                                                                                                  US-09-834-628-1
                                                                                                                                                                                                                                                                                                                                   APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PEPTIDES FOR INHIBITION OF
FILE REFERENCE: 05823,0198-00000
CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
NUMBER OF SEQ ID NOS: 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Human immunodeficiency virus type 1 US-09-779-451-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
US-09-834-628-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                            Matches
                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: YU, YEON GYU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/09834628 Patent No. US20020119922A1
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                 OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                 LENGTH: 36
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                                                                          Local Similarity
les 35; Conser
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les 35; Conserv
                   1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98.0%;
97.2%;
                                                                                         98.0%;
97.2%;
                                                                      Score 192; DB IV;
Pred. No. 1.3e-16;
Nicmatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 192; DB 10;
Pred. No. 1.3e-16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        OF HIV INFECTION
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                                                                                                             Length 36;
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                                                                            Indels
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                                                                        Gaps
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US-09-854-816-108
Sequence 108, Application US/09854816
Patent No. US20020151473A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Thes 35; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE DESCRIPTION: SEQ ID NO: 1: 19-854-816-1
                                                                                                                                                                                                                                                                                                   1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                      1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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APPLICATION NUMBER: US/09/854,816
ETILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                   TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: Linear MOLECULE TYPE: DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                  APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
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ADDRESSEE: Genente
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Constrained Helical Peptides and Methods of
   NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: South San
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 36 amino acids
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                                                                                                                                                                                                                                                                                                                                                                               Conservative
Making Same SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94080
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                                                                      J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                         J. Kevin Judice
Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Christopher Phelan
Melissa A. Starovasnik
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
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                                                                                                                                                                                                                                                                                                                                                                                            98.0%;
97.2%;
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                                                      Wells
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Pred. No. 1.3e-16;
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TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 176
LENGTH: 37
TYPE: PRT
ORCANITION
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                                                                        ; OTHER INFORMATION: DP178c peptide US-09-848-616-176
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                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 176, Applic Publication No. US20 GENERAL INFORMATION:
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 Matches
                  Best Local Similarity
                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Sebbel, Peter
APPLICANT: Dunant, Nicolas
                                                                                                              FEATURE:
                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 108: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 94080
COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
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CITY: South San Fi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: Amino Acid
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                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09848616
p. US20030054010A1
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 Conservative
                  98.0%;
97.2%;
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97.2%;
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Pred. No. 1.3e-16;
                  Score 192; DB 9;
Pred. No. 1.4e-16;
 Mismatches
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                                  Length 37;
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Indels
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1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36

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В

2 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 37

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RESULT 12
US-10-040-349B-2
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US-09-779-451-41
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              Sequence 2, Application US/10040349B Publication No. US20030082521A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 4
LENGTH: 56
TYPE: PRT
GENERAL INFO
                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/09779451 Patent No. US20020094521A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
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Patent No. US20020094521A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Garaham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/235,901 PRIOR FILING DATE: 2000-09-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
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CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn version 3.0
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SOFTWARE: PatentIn vei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/235,901
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                       ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 46
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                                                                                                                                                                          1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                        YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 51
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97.2%;
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                                                                                                                                                                                                                                                         Score 192; DB 10;
Pred. No. 2.1e-16;
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Pred. No. 1.7e-16;
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                                                                                                                                                                                                                                                                               DB 10;
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GENERAL INFORMATION:

APPLICANT: REPKE, HEINRICH

BUDDE, ECKHARD NICOLAUS, STEF?

S, STEFAN PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND

APPLICANT:

APPLICANT:

Sequence 81, Application US/10059271 Publication No. US20030082208A1

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Qy
RESULT 14
US-10-059-271-81
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                                                                                                                                                                                                                    ; OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: peptide US-10-059-271-84
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                                                                                                                                                                                                                                                                                                              SEQ ID NO 84
LENGTH: 221
TYPE: PRT
                                                                                                                                               Best Local Similarity Matches 35; Conserv
                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 84, Application US/10059271 Publication No. US20030082208A1
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Matches 35; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: DE 101 06 295 PRIOR FILING DATE: 2001-02-02 NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/040,349B CURRENT FILING DATE: 2002-07-09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: REPKE, HEINRICH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 01-078-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Peptide
LOCATION: (1)...(177)
OTHER INFORMATION: polypeptide derived
                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TILE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND TILE OF INVENTION: BEING IMMOBILIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT ORGANISM: Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 177
                                                                        131 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 139
                                                                                                            1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YTSLIHTLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NICOLAUS, STEFAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BUDDE, ECKHARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Krell, Tino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Charloteaux, Benoit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            El Habib,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chevalier,
                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALBRE-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptide Inducing Antibodies Neutralizing HIV
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                                                                                                                                                                  .98.0%;
97.2%;
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97.2%;
                                                                                                                                                                Score 192; DB 9;
Pred. No. 9.2e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 192; DB 9;
Pred. No. 7.2e-16;
                                                                                                                                                 Mismatches
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                                                                                                                                                                                 Length 221
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                                                                                                                                                                                                                                                        Synthetic
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Query Match
Best Local Similarity
""" tohes 35; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
US-10-059-271-82
Sequence 82, Application US/10059271
Publication No. US20030082208A1
GENERAL INFORMATION:
Search completed: May 16, 2003, 12:10:25 Job time : 15.759 secs
                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: peptide
US-10-059-271-81
                                                                                                                                                                                                                                                                             APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
TITLE OF INVENTION: BEING IMMOBILIZED
FILE REFERENCE: ALBRE-22
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: PATENTINE 254
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 81
LENGTH: 232
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                              FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide
-10-059-271-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: BEING IMMOBILIZED FILE REFERENCE: ALBRE-22 CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31 PRIOR APPLICATION NUMBER: DE 101 06 295 PRIOR FILING DATE: 2001-02-02 NUMBER OF SEQ. ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: REPKE, HEINRICH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                  BUDDE, ECKHARD
                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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97.2%;
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97.2%;
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Pred. No. 1.1e-15;
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Pred. No. 9.7e-16;
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                                                                                                                                         0;
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                                                                                                                                                                          Length 254;
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Result
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    il number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance score greater than or equal to the score of the result and is derived by analysis of the total score distribut
                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seq
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2: /SIDS2/gcgdata/g
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Match
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Gapop 10.0 ,
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195
1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF
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147.792 Million cell updates/sec
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Listing first 45 summaries
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/SIDS2/gcgdata/geneseg/genesegp-embl/AA1986.DAT:*
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/SIDS2/gcgdata/geneseg/genesegp-embl/AA1988.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1984.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                            /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1994_DAT:*
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           В
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                                                                                                                                                                                                                                           ID
      AAR64364
AAR98398
AAW17011
AAY22912
AAY22805
AAY31955
AAY31975
AAAY31675
AAB52688
AAB52688
                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                 score distribution
HIV-1 derived pept
SEQ ID NO. 108 fro
SEQ ID NO. 1 from
Synthetic peptide
HIV-1 LAI 9p41 T-2
T20/DP178 peptide
T20/DP178 peptide
T20/DP178 peptide
                                                                                                                                                                                                                                      Description
                                                                                                                                                                          DP-178 derived fro DP178 corresponds
                                                                                                                                                                                                                                                                                                                                                              to have a being printed,
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Viral core polypep	ABB01970	22	36	99.0	193	Ü
al core p	B014	22	36	99.0	193	4
1 DP178,	ABB01414	22	36	9.	193	ū
al DP178/107-	ABB01392	22	36	9.	193	2
1 DP178/10	ABB01391	22	36	9.	193	Ē
uorescein-la	ABB01185	22	36	9.	193	Ö
al DP178/10	ABB01143	22	36	9.	193	9
1 DP178/10	ABB01100	22	36	9.	193	8
1 DP178/10	ABB00832	22	36	9.	193	37
al DP178/10	ABB00628	22	36	9.	9	8
l DP178/10	ABB00627	22	36	9.	9	5
al DP178/10	ABB00626	22	36	9.	9	4
F1 prot	ABB00600	22	36	9.	193	ũ
1 DP178/10	ABB00495	22	36	9.	9	ລັ
1 DP178/10	ABB00494	22	36	9.	9	Ξ
l DP178/10	ABB00088	22	36	9.	9	õ
tin-labelled	ABB00087	22	36	9.	9	9
-1 gp41 pep	ABB00024	22	36	9.	9	æ
1 gp41 pept	AAG67039	22	36	9.	9	?7
ŗ	AAB82961	22	36	9	9	9
2 transmembra	AAU70741	22	36	9	9	ŭ
viral envelop	AAU70179	22	36	9.	9	4
e polypeptide	AAY89999	21	36	9.	9	ü
e polypeptid	AAY89983	21	36	9	9	2
e polypeptide	AAY89982	21	36	9.	9	ï
e polypeptide	AAY89777	21	36	9.	9	õ
e polypeptide	AAY89735	21	36	9	9	9
e polypeptide	AAY89692	21	36	9	9	œ
e polypeptide	AAY89424	21	36	9.	193	7
e polypeptide	AAY89242	21	36	9	193.	6
e polypeptide	AAY89136	21	36	9.	193	С
e polypeptide	AAY89135	21	36	9	193	4
re polypeptid	AAY88729	21	36	9	193	w
polypeptide	AAY88665	21	36	99.0	193	2
HIV-1 isolate LAI	AAB14533	21	36	9	193	Ļ

ALIGNMENTS

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AAR64364
ID AAR6
RESULT 1
         07-JUN-1993;
                                                                                                                                                                                                                  human immunodeficiency virus; transmembrane protein; gp41; alpha helix; leucine zipper; DP-185.
                                                                                                                                                                                                                                           antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI;
                                                                                                                                                                                                                                                                                                             AAR64364;
                                                                                                                                                                                                                                                                                                                                  AAR64364 standard; Peptide; 36 AA.
                              07-JUN-1994;
                                                    22-DEC-1994.
                                                                         W09428920-A
                                                                                                                    Modified-site
                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                DP-178 derived from HIV-1 isolate LAI has antiviral activity
                                                                                                                                                                                                                                                                                       24-AUG-1995
                                                                                                                                                                Modified-site
                                                                                                                                                                                                                                                                                      (first entry)
         93US-0073028
                              94WO-US05739
                                                                                                                    38
                                                                                                        /note=
                                                                                                                                                     /note=
                                                                                                                                                                           Location/Qualifiers
                                                                                                                            "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic macromolecular carrier gp. attached"
                                                                                            "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier gp. attached"
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RESULT 2
AAR98398
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                                                                                                                                                                                                                                                                                                                            Z X X X X Z
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
Best Loc
Matches
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Petteway SI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein-protein interactions, and possess anti-viral activity. Homologues of these peptides were identified by a computer assisted peptide sequence search. The peptides inhibits transmission to uninfected cells, and can also be used as type and/or subtype specific
                                                                                                                                                                                                                                                                                                                                      Antifusogenic activity; antiviral capability; coiled-coil peptide; ALLMOTI5; 107x178x4; PLZIP search motif; viral transmission; HIV; influenza virus; hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                         DP178 corresponds to residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diagnostic tools.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. I forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Computer search generated synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1995-036105/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYDU-) UNIV DUKE
                                 Inhibiting viral transmission, isolated peptide recognised by sequence search motif
                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                   17-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR98398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR98398 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR64364 is designated DP-178, and corresponds to amino acids
                                                                                       WPI; 1996-309517/31.
                                                                                                              Barney SO, I
Matthews TJ,
                                                                                                                                                                                           06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                 20-DEC-1995;
                                                                                                                                                                                                                                                          27-JUN-1996
                                                                                                                                                    (UYDU-) UNIV DUKE.
                                                                                                                                                               (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page 132; 182pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bolognesi
, Wild CT;
                                                                                                               Bolognesi DP,
, Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA;
                                                                                                                                                                                          95US-0470896
94US-0360107
                                                                                                                                                                                                                                 95WO-US16733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DP,
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                                                                                                              Lambert DM, Wild CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 193;
Pred. No. 7.
                                                                                                                                                                                                                                                                                                                                                                                         638-673 of HIV-1(LAI) gp41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                e.g. HIV or RSV, to a cell - using an ALLMOTI5, 107x178x4 or PLZIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptides - are inhibitors of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matthews TJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 16;
.6e-17;
                                                                                                                              Langlois
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Disclosure;

Fig 1; 471pp; English

밁 Qy

YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

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RESULT 3
AAW17011
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Best Local :
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Best Local
                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The sequences given in AAR98398-408 represent peptides which exhibit antifusogenic activity, antiviral capability and/or the ability to modulate intracellular processes involving coiled-coil peptide structures. These peptides are recognised by the ALLMOTIS, 107x178x4 and PLZIP search motifs. These peptides may be used to inhibit the transmission of a virus, pref. HIV, influenza virus, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV; SIV: human; simian immunodeficiency virus; glycoprotein 41; transmembrane; antiviral; DP-178; DP-107; vaccine; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW17011 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                       reverse transcriptase, viral protease, cytokine, glycosylation or vira mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication or inhibiting transmission. They may also be used in vaccines for protecting against HIV infection.
                                                                                                                                                                                                            AAW17011 represents a peptide designated DP-178, a peptide derived from HIV type 1 glycoprotein 41 (gp41) transmembrane protein. The peptide corresponds to residues 638-673 of gp41. DP-178 and its derivatives are used in combination with a therapeutic agent, e.g. a reverse transcriptase, viral protease, cytokine, glycosylation or viral
                                                                                                                                                                                                                                                                                                                         Claim 2; Figure 1; 84pp; English.
                                                                                                                                                                                                                                                                                                                                                            Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent - useful for treatment of HIV infection, esp. inhibiting replication or transmission of HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1 LAI isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV-1 derived
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hepatitis B virus,
                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       replication;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-DEC-1996
                                                                                                                                                                                                                                                                                                                                                          inhibiting replication or transmission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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35; Conser
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                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36 AA;
                                                                                                                         36 AA;
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                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lambert DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptide useful
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97.2%;
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1; Mismatches
                                                Score 193; DB 18;
Pred. No. 7.6e-17;
1; Mismatches 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AΑ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV infection
                                                    0;
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Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                            Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY22871, AAY22878, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain
                                                                                                                                                                                               constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Braisted A, Judice Wells JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAY-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY22912 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 233-234; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-NOV-1997;
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                 1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                   of "floppy"
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                                                                       Similarity 97.3
35; Conservative
                                                                                                                                                  36 AA;
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96US-0743698.
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                                                                                                                                                                                   peptides or proteins.
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                                                                                        99.0%;
97.2%;
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                                                                     Score 193; DB
Pred. No. 7.6e
1; Mismatchės
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phelan JC,
                                                                     DB 19;
7.6e-17;
hės 0;
                                                                                                        Length 36;
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Вb δÃ

YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36

Local Similarity 97.1 tosal Similarity 97.1

0,

Gaps

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RESULT 5
AAY22805
ID AAY2
XX
AC AAY2
AC AAY2
XX
DT 19-A
XX
DE SEQ
XX
HIV;
                                                                        PT PT
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Query Match
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Matches 35
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                                                                                                                     available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; fo of synthetic antibody clones from phage display libraries, o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV. gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY22805 standard; Peptide;
                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 143-144; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Braisted A, Judice JK, Wells JA;
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06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC
                                                                                                      of "floppy"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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96US-0743698.
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                                                                                                        peptides
                99.0%;
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                                                                                                        or proteins.
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Score 193; DB 19;
Pred. No. 7.6e-17;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Phelan JC,
                                 Length 36
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RESULT 6
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The invention relates to methods for the synthesis of peptides, in particular T-20 and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T20-like peptide, followed by deprotection of the side chains to yield the final T-20 or T-20-like peptide. The invention also relates to individual peptide fragments (see ANY31956-73) which act as intermediates in the synthesis of peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as
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Matches 35
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T-20; DP-178; HIV-1 LAI; gp41; peptide synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic peptide T-20 (DP-178).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY31955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY31955 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Methods of peptide synthesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kang M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-MAR-1998;
01-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-DEC-1999
                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T-20 like peptides
  سا
                                      1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF
YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                35; Conser
                                                                                                                                                                                                     peptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bray B,
                                                                                                                                                               36 AA;
                                                                                Conservative
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98US-0071877.
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36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lichty
                                                                                                 99.0%;
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                                                                              Score 193; DB 20;
Pred. No. 7.6e-17;
1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mader C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 particularly used to produce T-20
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                                                                                                                      Length
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RESULT 7 AAY31974

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                                                                                                                                                                                                                                                  RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence represents a peptide, designated T-20 (or DP-178), that corresponds to amino acids 638-673 of the C transmembrane protein 9p41 of HIV-1 LAI isolate. The invention CC relates to methods for the synthesis of peptides. In particular CC and N-terminal modified T-20 (see ANY31955) and T-20-like peptides. CT he method involves synthesizing specific side-chain protected CT peptide fragment intermediates (see ANY31956-73) of T-20 or a CT -20-like peptide on a solid support, coupling the protected CT -20-like peptide on a solid support, coupling the protected CT -20-like peptide. The invention also relates to individual CT -20-like peptide. The invention also relates to individual CT -20-like peptide. The invention also relates to individual CT -20-like peptide of interest (e.g. T-20), and to particular groups of CT -20-like peptide of interest (e.g. T-20), and to particular groups of CT -20-like peptide of interest. The method allows for the large scale, CX cx considered production of high purity peptides.
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                             Matches
Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response chemoattractant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAR-1998;
01-MAY-1998;
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                                                                               T20/DP178 peptide fragment #33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Methods of peptide synthesis,
T-20 like peptides -
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                                                                                                                          23-FEB-2001
                                                                                                                                                                                                         AAB52655 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
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                                                                                                                                                                                                                                                                                                                                                                                             1 Similarity 97.3
35; Conservative
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98US-0071877
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                             Score 193; DB 20;
Pred. No. 7.6e-17;
1; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  particularly used to produce T-20
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                     up-regulation;
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Best Local
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WPI; 2000-656493/63
                                                                                                                                                            Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 12; Page 24; 148pp; English.
                    Wang
                                                                   05-MAY-1999;
                                                                                         05-MAY-2000;
                                                                                                                 09-NOV-2000
                                                                                                                                       WO200066622-A1
                                                                                                                                                                                     chemoattractant.
                                                                                                                                                                                                Antiinflammatory; T20/DP178; formyl peptide receptor famil
                                                                                                                                                                                                                                                                                AAB52688
                                                                                                                                                                                                                                                                                                      AAB52688 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                 T20/DP178 peptide fragment #66.
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                                            US DEPT HEALTH & HUMAN SERVICES
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                    . Oppenheim
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                                                                                          2000WO-US12371
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                                                                                                                                                                                        receptor family; FPR; inflamma+~~~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of peptide agents with a sequence corresponding T20/DP178 or T21/DP107 formyl peptide receptor used to modulate inflammation -
                                                                   99US-0132686.
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                                                                                                                                                                                                                                                                                                      Peptide;
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                    'n,
                                                                                                                                                                                                                                                         entry)
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97.2%;
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Pred. No. 7
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                    Gong W,
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                                                                                                                                                                                             inflammatory response up-regulation;
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                    J,
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                    Murphy PM;
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RESULT
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Best Local 9
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           interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an
                                                                      The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response
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                                                                                                                                                     Claim 14;
                                                                                                                                                                                     Administration of peptide agents with a sequence corresponding partial-Length T20/DP178 or T21/DP107 formyl peptide receptor antaronies is used to modulate inflammation.
                                                                                                                                                                                                                                                                                                                                         05-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1.
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                                                                                                                                                                                  antagonist
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                                                                                                                                                                                                                                                                                                         (USSH)
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35; Conserva
                                                                                                                                                                                                                                                                                                         US DEPT HEALTH & HUMAN
                                                                                                                                                  Page 40; 148pp;
                                                                                                                                                                                                                                                                           Oppenheim JJ,
                                                                                                                                                                                  is used to modulate
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1; Mismatches
                                                                                                                                                                                  inflammation
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                                                                                                                                                                                                                                                                                                         SERVICES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammatory response up-regulation;
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1.6e-17;
nes 0;
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                                            of HIV (human immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or commit the coiled coil solution structure of the N-helical domain coiled the heptad repeat region), or can correspond or mimic the C-helical commin (the transmembrane-proximal amphipathic alpha-helical segment), or the gp41 core 6-helix bundle, which is formed by the interaction coiled N- and C-helical domains of three gp41 proteins. The peptides can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be combination of N-helical and C-helical peptides), and can be alternately linked together to form a peptide which mimics the core 6-helix bundle. Administration of the peptide of an analysts and construction of the peptides of an analysts and construction of the peptides.
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                                                                                                                                                                                                                                                                                                      claimed peptides derived from the C-helical domain of the gp41 envelope glycoprotein from a variety of HIV-1 isolates. The invention relates to raising a neutralising antibody response to a broad spectrum
                                                                                                                                                                                                                                                                                                                                                                                                                                  Raising neutralizing antibody response to human immunodeficiency virus, comprises administering a polypeptide capable of forming a stable coiled-coil solution structure -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wild CT,
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humoral response, with the production of antibodies against gp41 structures involved in viral entry. As these portions of gp41 are conserved, such antibodies may be effective against a broad range
                                                                                                                                                                                                                                                                                                                                                             Sequences AAB14532-B14534 and AAB14569-B14602 represent specifically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-465959/40
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07-JAN-2000; 2000US-0480336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                envelope glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antibody;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV-1; gp41 C-helical domain;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               transmembrane-proximal amphipathic alpha-helical segment;
6-helix bundle; viral entry inhibition; immunogenic;
body; humoral response; broad spectrum vaccine; anti-HIV;
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35; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                Page 12;
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                                                                                                                                                                                                                                                                                                                                                                                              97pp; English.
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97.2%;
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No. 7.6e-17;
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         function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bloactive peptides selected from a growth factor, cytokine, differentiation factor, interfeukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences ANV88651-y90055 represent core polypeptide fragments that can be used in the invention. Some sequence among those indicated also comprise enhancer fragments at terminal endagences in the invention.
                                                                                                                                                                                                            The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV strains and isolates. The peptide compositions may be administered as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect uninfected cells. A composition comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV cell entry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                polypeptide that they are linked to. The core polypeptides are any
                                                                                                                                                                                                                                                                                                                         Disclosure; Page 21; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                 comprises enhancer
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                                                                                                                                                                            polypeptide that may be introduced into a living system and that can
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                                                                                                                                            interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences polypeptide indicated also comprise enhancer fragments at terminal earning those indicated also comprise enhancer fragments at terminal earning the sequences.
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                                                                                                                                form hybrid polypeptides.
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                                                                                                                                                                                                                                                                                                                           The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the
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                                                                                                                                                                                                                                                                           polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that c
                                                                                                                                                                                                                                                                                                           pharmacokinetic properties such as increasing the half-life of any core
                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     comprises enhancer sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-136792/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09959615-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Core polypeptide fragment T No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY89135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY89135 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-NOV-1999.
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                 Similarity
                                                                                                      hybrid
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                                                                    36 AA;
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US11219
                                                                                                  polypeptides.
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                 99.0%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                   124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Merutka G,
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        Score 193; Db 21;
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Mismatches
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                                DB 21;
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Search completed: May 16, 2003, 11:12:06
Job time: 32.4578 secs
                                                                                                                                                     Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1 HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; anglogenic factor.
                                                                                                                                                                                                                                                                                      interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusegenic treatments. Sequences AY88651-y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 30; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A new hybrid polypeptide with enhanced pharmacokinetic properties comprises enhancer sequence \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-136792/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-1999;
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                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                        and form hybrid polypeptides.
                                                                           1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Guthrie KI,
                                                                                                                                                                                                                                  36 AA;
                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US11219.
                                                                                                                                                                           99.0%;
97.2%;
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                                                                                                                                                         Score 193; DB Pred. No. 7.6e 1; Mismatches
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                                                                                                                                                         DB 21;
7.6e-17;
hes 0;
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                                                                                                                                                                                             Length 36;
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GenCore version 5.1.4_p5_4578

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OM protein - protein search, using sw model

Run on: May 16, 2003, 11:04:54; Search time 12.1446 Seconds (without alignments)

284.970 Million cell updates/sec

Title: US-09-623-533A-541
Perfect score: 195
Sequence: 1 YTSLIHSLLEESONQOEKNEQELLELDKWASLWNWF 36

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

SUMMARIES

Result No.	Score	Query Match	Length I	DB	ID ·	Description
1	193	99.0	851	2	£33985	env polyprotein -
2	9		854	N	132	protein -
ω	193	99.0	856	ш	VCLJH3	polyprotei
4	ø	9.	861	1	VCLJLV	polyprotein
5	184	4.	443	2	C41621	polyprotein
6	184	94.4	856	۲	VCLJVL	
7	184	94.4	856	Н	VCLJ3W	polyprotein
œ	184		861	μ	VCLJSC	
9	181		357	Ν	S21994	\Box
10	. 181		358	N	S21998	protein
11	. 180		357	Ν	S21996	
12	179		859		VCLJMN	σ
13	178		855	-	VCLJA2	env polyprotein pr
1 14	177	90.8	847	N	T09448	(D
1.0	176		0 4	אנ	607010	env procern - nund
17	175		א ני א ני	۱ د	\$33003 \$35003	DECEMBER 1
18	175		358	N	\$22000	envelope protein q
19	175	89.7	358	2	S70417	protein
20	175	89.7	852	ν	T12016	glycopro
21	174	89.2	357	2	S22004	
22	172	88.2	357	Ν	S21992	
23	172	88.2	853	N	S54384	polyprot
24	172	88.2	855	ب	VCLJZR	env polyprotein pr
25	171	87.7	357	N	S22006	envelope protein g
26	171	87.7	843	سر	H44001	
27	170	87.2	846	μ	VCLJND	
28	168	•	852	\vdash	VCLJBR	
29	166	85.1	729	<u>س</u> ــا	VCLJKX	env polyprotein pr

RESULT 3 VCLJH3

45	44	43	42	41	40	39	ა 8	37	36	35	34	33	32	31	30
87	87.	88	88	88	117	134	145	147	153	158	158	161	162	165	166
44.6	44.6	45.1	45.1	45.1	60.0	68.7	74.4	75.4	78.5	81.0	81.0	82.6	83.1	84.6	85.1
151	151	889	881	881	863	877	357	856	854	136	136	868	454	859	861
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S30452	S30448	VCLJG5	S03068	VCLJG3	A53034	S49197	S21990	A44963	VCLJSI	JT0954	JU0266	VCLJH4	B41621	T01672	VCLJKB .
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env protein	env protein	env polyprotein -	env protein - huma	env polyprotein	gag polyprotein	envelope protein	envelope protein	env polyprotein p	env polyprotein pr	envelope polyprote	envelope polyprote	env polyprotein	env polyprotein D	envelope polyprote	env polyprotein

ALIGNMENTS

YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36	Query Match 99.0%; Score 193; DB 2; Best Local Similarity 97.2%; Pred. No. 4.1e-15; Matches 35; Conservative 1; Mismatches 0;	Nature 348, 69-73, 1990 Nature 348, 69-73, 1990 A; Mitle: HIV-1 tropism for mononuclear phagocytes can be A; Reference number: \$13288; MUID:91043044; PMID:2172833 A; Accession: \$13288 A; Status: preliminary A; Molecule type: DNA A; Residues: 1-854 cOBR> C; Superfamily: type E retrovirus env polyprotein	RESULT 2 \$13288 \$13288 - 'human immunodeficiency virus type 1 C:Species: human immunodeficiency virus type 1, HIV-1 C:Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change C:Accession: \$13288	Qy 1 YTSLIHSILEESQNQQEKNEQEILELDKWASLWNWF 36	Query Match 99.0%; Score 193; DB 2; Best Local Similarity 97.2%; Pred. No. 4.1e-15; Matches 35; Conservative 1; Mismatches 0;	env polyprotein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HTV-1 C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1 C;Accession: S33985 R;Carlini, F. Submitted to the EMBL Data Library, November 1991 A;Reference number: S33979 A;Accession: S33985 A;Ccession: S33985 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-851 <car> A;Cross-references: EMBL:211530; NID:g60192; PIDN:CAA77628.1; PID:g60199 C;Superfamily: type E retrovirus env polyprotein</car>	
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RESULT 5
C41621
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C; Date: 17-May-
                       env
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Superfamily: type E retrovirus env polyprotein (C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; E;H-30/Domain: signal sequence #status predicted <SIG>E;31-516/Product: exterior membrane glycoprotein #status predicted <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Ratner,
N; Alternate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Reference number: A90866;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Title: Nucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R; Wain-Hobson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N; Alternate names:
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A; Residues: 1-856 < RAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nature 313,
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-511/Product: exterior membrane glycoprotein #status predicted <EXT>
-2.856/Product: transmembrane glycoprotein #status predicted <TMM>
-3.856/Product: n #status predicted <TMM>
                                                                                                                                                                                                                                                                                                                                                                                          ;517-861/Product: transmembrane glycoprotein #status predicted <TMM>
;88.136,141,146,161,165,191,202,239,246,267,281,294,300,306,337,344,361,391,397,402,41
;616,621,630,642,679,755,821/Binding site: carbohydrate (Asn) (covalent) #status predi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Accession: A03975
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Keywords: AIDS; capsid protein;
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                       polyprotein
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97.2%;
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    human immunodeficiency virus

                          immunodeficiency
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NID: g326417; PIDN: AAB59751.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GB:K02008; GB:K02009;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 193; DB 1;
Pred. No. 4.1e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           coat protein; glycoprotein; immunodeficiency;
                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                        Score 193;
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J.;
                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.;
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                                                                                                                                                                                                                                                                                                                No. 4.1e-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Livak, K.J.; Chang, N.T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cole,
                       virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PMID:2981635
                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                     678
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S.; Alizon,
                          type
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                                                                                                                                                                                                                                                                                                                                        Length 861;
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Gallo, R.C
                          1 (fragment)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-Jul-1999
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                                                                                                                                                                                                                                                                                  0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386, 392, 397, 40
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                    N; Contains:
C; Species: h
                                                                            VCLJ3W env polyprotein precursor - human immunodeficiency
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                                                                                                                                       RESULT
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human

coat protein gp120; coat protein gp41
human immunodeficiency virus type 1, HIV
Sep-1988 #sequence_revision 30-Sep-1988

HIV-1 virus

type

Н

(isolate

#text_change

07-Nov-1997

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C;Superfamily: type E retrovirus env polyprotein C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodefi. F;1-30/Domain: signal sequence #status predicted <SIG> F;31-511/Product: exterior membrane glycoprotein #status predicted <EXT> F;512-856/Product: transmembrane glycoprotein #status predicted <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;252-443/Product:
F;424-443/Domain: t
F;9,23,36,48,78,101
                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Reference number: A93355; MUID A; Accession: A03974
A; Molernia 1
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                                                                                                                                                                                                                                                                                                                                                                           C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Note: host Homo sapiens (man)
C; Date: 17-May-1985 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Keywords:
F; 1-251/Proc
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A;Gene: env
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Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus type
A;Reference number: A41621; MUID:92107924; PMID:1763038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Accession: C41621
R; Burger, H.; Weise
                                                                                                                                                                                                                                                                                                                                                                                            A; Cross-references: GB: K02083;
                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-856 < MUE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nature 313, 450-458, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R; Muesing, M.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C:Accession: A03974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Species: human immunodeficiency virus type 1, HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; A;Note: this virus was isolated from the mother's sexual part
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N;Alternate names: coat polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Residues: 1-443 <BUR>
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                                                                                                                                                                               ;512-856/Product: transmembrane glycoprotein #status predicted <TMM>;88,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,361,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Superfamily: type E retrovirus env polyprotein
;Reywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency;
;1-251/Product: coat protein gp120 (fragment) #status predicted <GP1>
;52-44/Product: coat protein gp41 (fragment) #status predicted <GP2>
;424-443/Domain: transmembrane #status predicted <TMN>
;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding
                                                                                                                                      Query Match
                                                                                           Matches
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Best Local
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  869
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                                                                                                                   Local
                     1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNW
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es 33; Conser
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YTSLIHSLIEESQNQQEKNEQELLELDKWANLWNW
                                                                                           l Similarity
33; Conser
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                                                                                         Conservative
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                                                                                                            94.4%;
94.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MUID:85111157; PMID:298210
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                                                                                                                                                                                                                                                                                                                                                                                            NID:g555008; PIDN:AAB59873.1;
                                                                                           2;
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                                                                                                              Score 184; DB 1;
Pred. No. 4.9e-14;
                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C.D.; Benton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PMID: 2982104
  672
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                                                                                                                                 Length 856;
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                                                                                           Indels
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partner
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AIDS/lymphadenopathy
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us-09-623-533a-541.rpr

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A; Reference number: S
A; Accession: S21994
A; Molecule type: DNA
A; Residues: 1-357 <ST
                                                            envelope protein gp120/gp41 - human immunodeficiency virus type 1 c;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 27B c;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000 C;Accession: S21994; S70421 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; Hacke, W. submitted to the EMBL Data Library, July 1991 A;Description: Distinct populations of HIV-1 in blood and cerebrospinal flu. A;Reference number: S21990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Gene: env
C;Superfamil
C;Keywords:
F;1-29/Domai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Gurgo, C.; Guo, H.G.; Fran
Virology 164, 531-536, 1988
A;Title: Envelope sequences
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A; Molecule type: DN
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A; Reference number:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Note: host Homo sapiens (man)
C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-1997
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R; Starcich, B.R.; Hahn,
Cell 45, 637-648, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Gene:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-861 <GUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Accession: B28922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        env polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Superfamily: type E retrovirus env polyprotein; superfamily: type E retrovirus env polyprotein; glycoprotein; polyprotein; Keywords: capsid protein; coat protein; glycoprotein; polyprotein; 1-29/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Superfamily: type E retrovirus env polyprotein
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Residues: 1-856 <STA>
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7,129,135,140,143,159,163,187,198,234,241,262,276,295,301,302,333,340,356,362,386,39
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                                                                                                                                                                                                                                                                                                                           YTSLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    precursor - human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s: coat polyprotein immunodeficiency virus
                           DNA
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        <STE1>
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91.7%;
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91.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of two new United States HIV-1 isolates MUID:88219542; PMID:3369091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shaw, G.M.;
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Pred. No. 4.
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Pred. No. 4.9e-14;
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                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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.9e-14;
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ted <GP2>
5,331,338,354,
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                                                                                                                                                                                                                 envelope protein gpl20/gp41 - human immunodeficiency virus type 1 (patient C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999 C;Accession: S70422; S21996
                                                        A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-357 <ST2>
                                                                                                                                     R:Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency
A;Reference number: S70417; MUID:92144209; PMID:1736940
                  A;Cross-references: EMBL:X61356; NID:g60181; A;Experimental source: patient 27L
                                                                                                                  A; Reference number: A; Accession: S70422
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Best Local :
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July 1991

PIDN:CAA43624.1;

PID:g1067129

virus

type

in

blood and

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A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1920 A;Title: Distinct populations of human immunodeficiency virus A;Reference number: S70417; MUID:92144209; PMID:1736940
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                                                                                                                                                                        A;MoLecule type: DNA
A;Residues: 1-222,'X',224-358 <STE2>
A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C:Species: human immunodeficiency virus A:VVariety: isolate 28 C:Date: 20-Feb-1995 #sequence_revision C:Accession: S21998; S70425
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A; Cross-references: EMBL: X61355;
C; Superfamily: type E retrovirus
                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-358 <STE1>
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A; Reference number: S21990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      139 YTTLIYTLIEESQNQQEKNEQELLELDKWASLWNWF 174
                                           1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF
32; Conserv
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32; Conserv
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immunodeficiency virus type 1, HIV-1
                                                                                          Conservative
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                                                                                                            92.8%;
88.9%;
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88.9%;
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NID:g60179
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                                                                                                          Score 181;
Pred. No. 4
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4; Mismatches
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Pred. No. '
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                                                                                     Mismatches
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. 4.1e-14;
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A;Gene: env
A;Gene: env
A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; polyprotein; transmembrane pr
C;Keywords: capsid protein; coat protein; glycoprotein; polyprotein; transmembrane pr
F;1-29/Domain: signal sequence #status predicted <SIG>
F;1-29/Domain: signal sequence #status predicted <EPP>
F;30-859/Product: env polyprotein #status predicted <EPP>
F;30-859/Product: env polyprotein #status predicted <EPP>
F;37,129,135,140,141,146,161,165,191,202,246,267,281,294,300,336,343,359,365,389,395,
F;87,129,135,140,141,146,161,165,191,202,246,267,281,294,300,336,343,359,365,389,395,
                                                                                                                                                                            C; Keywords: AIDS; capsid protein; coat protein; cF:1-30/Domain: signal sequence #status predicted
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C; Keywords: AIDS;
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A; Residues: 1-855 <SAN>
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C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-1997
C;Accession: A28922

B:Gurgo, C.; Guo, H.G.; Franchini, G.; Aldovini, A.; Collalti, E.; Farrell, plogy 164, 531-536, 1988
A;Reference number: A28922; MUID:88219542; PMID:3369091
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                                                                                                                                                       F;31-509/Product: exterior membrane glycoprotein #status predicted <EXT>
                                                                                                                                                                                                                                                   A;Gene: env
                                                                                                                                                                                                                                                                                        A;Cross-references: GB:K02007; NID:g328658; PIDN:AAB59882.1; PID:g328666
                                                                                                                                                                                                                                                                                                                                                           A; Reference number: A; Accession: A03976
                                                                                                                                                                                                                                                                                                                                                                                A;Title: Nucleotide sequence and expression of an AIDS-associated retrovirus (ARV-2). A;Reference number: A04003; MUID:85090453; PMID:2578227
                                                                                                                                                                                                                                                                                                                                                                                                                              Science 227, 484-492, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              env polyprotein precursor - human immunodeficiency virus
N;Alternate names: coat polyprotein
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A; Residues: 1-859 <GUR>
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C; Species: human i
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                                                                                  ;510-855/Product: transmembrane glycoprotein #status predicted <TMM>;87,129,140,158,184,190,200,244,265,292,298,304,334,341,358,364,388,394,400,408,445,
                                                                                                                                                                                                                                                                        Genetics:
                    Query Match
Best Local Similarity
    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sanchez-Pescador, R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Accession: A28922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Species: human immunodeficiency virus type 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccession: A03976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hte: 17-May-1985 #sequence_r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF 677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                   type E retrovirus env polyprotein OS; capsid protein; coat protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            precursor - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            s: coat polyprotein immunodeficiency virus
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Power, M.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91.8%;
91.7%;
                       91.3%;
88.9%;
  ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 179; DB 1;
Pred. No. 1.9e-13;
                       Score 178; DB 1; Pred. No. 2.5e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 180;
Pred. No. 5.
    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                Barr, P.J.; Steimer, K.S.; Stempien, M.M.; Brown-Sl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .5e-14;
                                                                                                                                                                                                   glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV-1
                                                                                                                                                                                   <SIG>
                                         Length 855;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 357
  Indels
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Job time :

secs

Search completed: May 16,

2003, 11:25:12

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env protein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #tc
C;Accession: S13289
                                                                                                                                                   C; Superfamily:
                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-847 <OBR>
                                                                                                                                                                                                                           A;Title: HIV-1 tropism for mononuclear phagocytes can be determined by regions of A;Reference number: S13288; MUID:91043044; PMID:2172833
A;Accession: S13289
                                                                                                                                                                                                                                                                                       R;O'Brien, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, Nature 348, 69-73, 1990
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
S13289
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C;Superfamily: type E retrovirus env polyprotein
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A;Status: preliminary; translated
A;Molecule type: DNA
A;Residues: 1-847 <PAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Species: human imm
C; Date: 16-Jul-1999
C; Accession: T09448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 envelope glycoprotein - human immunodeficiency virus type 1 (strain JRFL) C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 24-Nov-19
                                                                                                                                                                                                         A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R; Pang, S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:U63632; NID:g1465777; PID:g1465781
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Best Local
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                                                                                          Local Similarity
                    1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                 type E retrovirus env polyprotein
                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                          90.8%;
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Library, July 1996
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                                                                                          Score 177; DB 2;
Pred. No. 3.3e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 177; DB 2; Pred. No. 3.3e-13;
                                                                          Mismatches
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664
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                                                                                                                                                                                                                                                                                                                                              #text_change
                                                                                                          Length 847;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 847;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chen, I.S.; Koyanagi,
                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                        A.; Idler, K.;
                                                                                                                                                                                                                                                                                                                                              31-Oct-1997
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                                                                        Gaps
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Minimum DB
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Maximum Match 100%
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    3320875543321144333208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq length:
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 protein search, using sw model
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Query
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Gapop 10.0 , Gapext 0.5
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195
1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF
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245.895 Million cell updates/sec
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"Assignment of intrachain disulfice potential glycosylation sites of the immunodeficiency virus envelope glyco Chinese hamster ovary cells.";

" Riol. Chem. 265:10373-10382(1990)
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
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91ycoprotein (GP120); Transmembrane glycoprotein
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Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich B., Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A., Baumeister K., Ivanoff L., Petteway S.R. Jr., Pearson M.L., Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gallo Wong-Staal F.;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.

NCBI_TaxID=11678;

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InterPro: IPR000777; GP120.
Pfam; PP005516; GP120; 1.
Pfam; PF00517; GP41; 1.
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Submitted (APR-1997) to the EMBL/GenBank/DDBJ databases.
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NCBI_TaxID=11706;
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; AF038399; AAB99976.1;
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K03455; ENV$HXB2.
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Polyprotein;
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GP160 precursor [Contains: E
Transmembrane glycoprotein
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es; Retroviridae; Lentivirus.
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01-FEB-1996 (Rel. 33, Last sequence update)
15-JUJ-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: E
91ycoprotein (GP120); Transmembrane glycoprotein
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AIDS;
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                                                                                                                                                                             HIV;
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interPro; ipr000328; Env_GP41.

onterPro; ipr000777; Gp120.

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m; pF00517; Gp41.

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Q70626;
15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
                                    This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the ENthe European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by ancentities requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                                                                                                   Reitz M.S. Jr., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.M., Shaw G.M., Kong L.I., Weiss S.H., Waters D., Gallo R.C., Blattner W.; "Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB)."; AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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GlycoSuiteDB;
InterPro; IPR
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P03377;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
Human immunodeficiency vi
Viruses; Retroid viruses;
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01-FEB-1991 (Rel. 17, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP100 precursor [Contains: glycoprotein (GP120); Transmembrane glycoprotein
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Pfam; PF00517; GP41;
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01-FEB-1991 (Rel. 17, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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                                                                                                                                                                                                                                                                                                                                                   MEDLINE-90317906; PubMed-2370688; York-Higgins D., Cheng-Mayer C., Ba "Human immunodeficiency virus type replication, and cytopathicity are the viral genome.";
J. Virol. 64:4016-4020(1990).
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                                                                                                                                                     AIDS;
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HIV; M38427; ENV$SF33.
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NCBI_TaxID=11690;
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP707;
Pfam; PF00517; GP41; 1.
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es; Retroviridae; Lentivirus.
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21-JUL-1986 (Rel. 01, Tast sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: Figure 1997)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1996 (Rel. 01, Tast annotation update)
15-JUL-1986 (Rel. 01, Created)
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the European Bioinformatics Institute. The
use by non-profit institutions as long
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NCBI_TaxID=11700;
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                                           entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                             AIDS/lymphadenopathy retr
Nature 313:450-458(1985).
                                                                                                                                                          "Nucleic acid structure and expression AIDS/lymphadenopathy retrovirus.";
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Exterior membrane n (GP41)].

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IIV; K02083; ENV$PV22.

InterPro; IPR000328; Env_GP41.

InterPro; IPR000777; GP120.

Pfam; PF00516; GP120; 1.

Pfam; PF00517; GP41; 1.

AIDS; Coat protein; Polyprot'

Signal.

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01-NOV-1988 (Rel. 09, I
15-JUL-1999 (Rel. 38, I
Envelope polyprotein Gp
glycoprotein (GP120); T.
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HV1SC
ENV_HV1SC
P05878;
01-NOV-1988
01-NOV-1988
15-JUL-1999
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                                  Last sequence update)
Last annotation update)
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Cheng-Mayer C., Quiroga M.,
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IPR000777; GP120.
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-i- MISCELLANEOUS: THE MN JSOTATE TO PARTERMENT.
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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: glycoprotein (GP120); Transmembrane glycoproteir
                                              InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                PIR; A28922; VCLJMN.
HIV; M17449; ENV$MN.
                                                                                    EMBL; M17449; AAA44857.1;
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NCBI_TaxID=11696;
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                            PF00516; GP120; PF00517; GP41; 1
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                   protein;
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RESULT 14
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Envelope polyprotein GF
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MEDLINE=86235450; PubMed=3012778;

MEDLINE=86235450; PubMed=3012778;

Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R., Markham P.D.

Salahuddin S.Z., Wong-Staal F., Gallo R.C., Parks E.S., Parks

Salahuddin S.Z., Wong-Staal F., Gallo R.C., Parks E.S., Parks

"Genetic variation in HTLV-III/LAV over time in patients with
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-!- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A WAS PERINATALLY INFECTED BY HER MOTHER.
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the European Bioinformatics Institute. The use by non-profit institutions as lower modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sanchez-Pescador R., Power M.D., |
Stempien M.M., Brown-Shimer S.L.,
Levy J.A., Dina D., Luciw P.A.;
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       between
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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Query Match 91.3%; Score 178; DB 1; Best Local Similarity 88.9%; Pred. No. 4.8e-14; Matches 32; Conservative 3; Mismatches 1
ch completed: May 16, 2003, 11:13:38
time : 7.07229 secs
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1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

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Query Match 99.0%; Score 193; DB 15; Length 645; Best Local Similarity 97.2%; Pred. No. 2:4e-15; Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36	Transmembrane. NON_TER 1 1 SEQUENCE 645 AA; 72485 MW; B076514BE93362EC CRC64;	Ptam; PF00517; GP41; 1. AIDS; Coat protein; Envelope protein; Glycoprotein; Polyprotein;	PF00516;	InterPro; IPR000328; Env_GP41.	AF321563; AAK18810.1; -	processing."; Proc. Natl. Acad. Sci. H.S.A. 98.4587-4592/2001)	influences	"Localization of CD4+ T cell epitope hotspots to exposed strands of	Surman S., Lockey T.D., Slobod K.S., Jones B., Riberdy J.M.,		STRAIN=1007;	SEQUENCE FROM N.A.	[1]	NCBI_TaxID=11676;	Viruses; Retroid viruses; Retroviridae; Lentivirus.	Human immunodeficiency virus type 1.	Truncated envelope glycoprotein (Fragment).	(TrEMBLrel. 19,	(TrEMBLrel. 17,	O1-TIN-2001 (Trempt.pp) 17. Created)	Q993A6 PRELIMINARY; PRT; 645 AA.	LT 1 A6

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Reitz M., Hall L., Robert-Guroff M., Lautenberger
Shaw G., Kong L., Weiss S., Waters D., Gallo R., E
Shaw G., Kong L., Weiss S., Waters D., Gallo R., E
"Viral variability and serum antibody response in
Infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPRO00328; Env_GP41.
InterPro; IPRO00777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
Pfam; PF00517; GP41; 1.
Pf1051; Coat protein; Glycoprotein; Polyprotein;
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SEQUENCE 747 AA; 84250 MW; 732E836A52245F14
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Viruses; Retroid viruses; Retroviridae;
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01-NOV-1996 (TrEMBLrel.
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                           Mulder K.E.;
                                                                           Snaw G., Kong L., Weiss S., Waters D., Gallo R., E "Viral variability and serum antibody response in infected with HIV type 1 (HTLV type IIIB).", AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                          MEDLINE=95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner Weiss S.
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Best Local
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Best Local :
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                                                   Q70605
Q70605;
Q1-NOV-1996
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01-NOV-1996
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Q70604;
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Pfam; pF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein;
NON_TER 748 748
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SEQUENCE
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus type
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Viruses; Retroid NCBI_TaxID=11676;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-LW851
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                      Human immunodeficiency virus type 1
                                         Envelope glycoprotein
                                                                                                                                                                                                                                                                  AIDS;
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IPR000777; GP120.
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(TrEMBLrel. 01, Last sequence update)
(TrEMBLrel. 19, Last annotation updat
                                                                                                                                                                                                  Conservative
                                                                                                 PRELIMINARY;
           viruses;
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97.2%;
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           Retroviridae;
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Pred. No. 2
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.8e-15;
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                                                                       Query Match
Best Local :
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Reitz M., Hall L., Robert-Guroff M., Lautenberger Shaw G., Kong L., Weiss S., Watters D., Gallo R., B
"Viral variability and serum antibody response in infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   070608;
01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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SEQUENCE
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InterPro; IPRO00377; GP120.
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INTERPO; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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                                                                                                                             SEQUENCE
                                                                                                                                                                 AIDS;
                                                                                                                                                                                                                                                                                     Mulder K.E.;
                                                                                                                                                                                                                                                                                                          STRAIN=LW87-2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viruses; Retroid viruses; NCBI_TaxID=11676;
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                                                                                                                                             NON_TER
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                      YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                             Coat protein; Glycoprotein; Polyprotein; ER 752 752
                                                                                                                                                                              PF00516; GP120; 1
PF00517; GP41; 1.
   35; Conser
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                                                                                                                           752 AA;
                                                         Conservative
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97.2%;
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es; Retroviridae;
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                                                       Score 193; DB Pred. No. 2.8e 1; Mismatches
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Pred. No. 2.8e-15;
1; Mismatches 0;
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Blattner W.
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Matches 35
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Q89797;
01-NOV-1996
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SEQUENCE FROM N.A.
SHOUTH F., Federico M., Butto S., Or
Mitti F., Federico I., Verani P.,
Chara
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Sequence analysis of HIV-1 proviral DNA from chronically infected HUT-78 cellular clone."; J. Viral Diseases 1:40-55(1992).
MEDLINE=95127297: PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M.,
Shaw G., Kong L., Weiss S., Waters D
"Viral variability and serum antibod:
                                                                                                                                                                                ENV
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01-OCT-2001
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Pfam; PF00517; GP41; 1
AIDS; Coat protein; Gl
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Viruses; Retroid viruses; Retroviridae; NCBI_TaxID=11676;
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01-DEC-2001
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                                                                       STRAIN-LW90-2
                                                                                      SEQUENCE FROM N.A.
                                                                                                                         NCBI_TaxID=11676;
                                                                                                                                           Viruses;
                                                                                                                                                                                             Envelope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Borsetti A., Saggio I., Verar
"Variability of HIV-1 virus:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Biological and molecular characterization of producer and producer clones from HUT-78 infected with a patient HIV iscaling Res. Hum. Retroviruses 5:385-396(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=89352106; PubMed=2765297;
Federico M., Titti F., Butto S., Orecchia
Macchi B., Mangiano N., Verani P., Rossi
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InterPro; IPR000777; GP120.
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Verani P., Rossi G.B.;
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                                                                                                                                                                                                                                                                                                                                                                        YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 668
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Z11530; CAA77628.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                              35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                      munodeficiency virus type 1.
Retroid viruses; Retroviridae;
                                                                                                                                                                                           glycoprotein.
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(TrEMBLrel.)
(TrEMBLrel.)
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Robert-Guroff M., Lautenberger J., Hahn E
Weiss S., Waters D., Gallo R., Blattner W.
and serum antibody response in a laborato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein; Polyprotein; Transmembrane 96630 MW; 1A3767B9B7E98027 CRC64;
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Pred. No. 3.
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Mismatches 0;
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01-NOV-1996
01-NOV-1996
01-DEC-2001
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                                                    SEQUENCE
                                                                                                                                                                                                    "Mutation of human immunodeficiency gp41 resultis in loss of killing by
                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
CCBI_TaxID=11676;
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                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. Buckler C.E.;
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MEDLINE=86281827; PubMed=3016298;
                                                                 InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
                                                                                                                                                     J. Virol. 66:3151-3154(19)
EMBL; M19921; AAA44992.1;
                                                                                                                                                                                                                                       Dai L.C., Littaua R.,
                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE=92219406;
                                                                                                                                                                                                                                                                                                                        Buckler C
                                                                                                                                                                                                                                                                                                                                                                                                                                                            molecular
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InterPro; IPR000777; GP120.
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AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                            Submitted
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 Similarity
                                                                                                                                                                                                                                                                                                                                                                          .E., Buckler-White (JUL-1989) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                            clone.";
59:284-291(1986)
                                                                                                                                                                      66:3151-3154(1992).
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854 AA;
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                                                 Glycoprotein; Polyprotein; Transmembrane. 97124 MW; ABA0A1BF36D5595A CRC64;
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092877;
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CONFLICT
                                     Simian-Human immunodeficiency virus Viruses; Retroid viruses; Retroviri VIRUSES; Retroviri VIRUSE TaxID=57667;
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pfam; pF00517; GP41; 1.
AIDS; Coat protein; Glyco
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SEQUENCE FROM N.A. MEDLINE=99098984;
                                                                                              Envelope
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 molecular clone.";
J. Virol. 59:284-291(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
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01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; U26942; AAB60578.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-86281827;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            retrovirus in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Martin M.A.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro;
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IPR000777; GP120.
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 PubMed=9882298
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97.2%;
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                                                                                                                                                                                                                                                                                                                                               MW;
                                                      Retroviridae;
                                                                                                                                                                                                                                                                                       Score 193; DB Pred. No. 3.2e 1; Mismatches
                                                                                                           Last sequence update)
Last annotation updat
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A -> S (IN REF. 2).
G -> D (IN REF. 2).
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L (IN REF. 2)
S (IN REF. 2)
D (IN REF. 2)
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                                                    Lentivirus
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8.2e-15;
nes 0;
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, Etemad-Moghadam B.A., Hofmann W., Fanton J.W., Axthelm M.K., Letvin N.L.,

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RESULT
Q74090
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Q74599
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A Halloran M., Axthelm M.W., Letvin N.L., Sodroski J.G.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
R EMBL; AF041850; AAD12142.1;
R InterPro; IPR000372; ENV_GP41.
R InterPro; IPR000372; GP120.
R Pfam; PF00516; GP120; 1.
R Pfam; PF00517; GP41; 1.
R Pfam; PF00517; GP41; 1.
R AIDS; Coat protein; GP41; 1.
AIDS; Coat protein; GP41; 1.
SEQUENCE 856 AA; 97151 MW; C50BE0388FB73659 CRC64;
                                                                                          Query Match
Best Local S
Matches 35
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                                                                                                                                     Submitted (JUN-1996) to the EMBL/GenBank/DDBJ EMBL; D86068; BAAL2995.1; -
InterPro; IPR000228; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP12; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; AIDS; Coat protein; Glycoprotein; 238042A234C5668
                                                                                                                                                                                                                                                                                                         Cloyd M.W., Moore B.E.;
"Spectrum of Biological Properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q74599;
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                                                                                                                                                                                                                                                                                              (HIV-1) Isolates."
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J. Virol. 73:976-984(1999).
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Steenbeke T., Halloran M., I
Sodroski J.G.;
                                                                                                                                                                                                                                                 STRAIN=MCK1;
                                                                                                                                                                                                                                                                                                                                                STRAIN=MCK1
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                                                                                                                                                                                                                                                                                                                                 MEDLINE=90101366; PubMed=1688473;
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                                           YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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35; Conser
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                                                                                         core 193; DB red. No. 3.2e Mismatches
                                                                                                                                        n; Polyprotein; Transme 238042A234C56685 CRC64;
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                                                                                                     DB 15;
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Best Local S
Matches 35
Pfam; PF00516; GP120;
Pfam; PF00517; GP41; 1
AIDS; Coat protein; G1
SEQUENCE 854 AA; 96
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O90178;
01-NOV-1998
01-NOV-1998
01-DEC-2001
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01-NOV-1996
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Q74090;
                                                                           immunotoxin-resistant variant T cell line.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ
EMBL; AF070521; AAC28452.1; -
InterPro; IPR000328; EDV_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                  Fang H., Pincus S.H.;
"Spontaneous activation of human immunodeficiency virus
"mmunofoxin-resistant variant T cell line.";
                                                                                                                                                                                                                                                                                                                                                                                                                         Viruses; Retroid viruses; NCBI_TaxID=11676;
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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NCBI_TaxID=11676;
                                                                                                                                                                                                SEQUENCE FROM N.A. Fang H., Pincus S.
                                                                                                                                                                                                                                                                                 selected with immunotoxins
infected T cells.";
                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE=95074930;
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Virology 174:103-116(1990).
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                                                                                                                                                                                                                                                                                                                       Fang H., Pincus S.H.;
"Unique insertion sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Iwatani
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856 AA;
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G (TrEMBLrel.
L (TrEMBLrel.
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                                                          GP120;
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                                                                                                                                                                                                                                                                                                                                                                 PubMed=7983770;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PubMed=1688473;
Glycoprotein;
96885 MW; 080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein; Polyprotein; Transmembrane. 97396 MW; FE3E784C423C108C CRC64;
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[73
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97.2%;
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.n; Polyprotein; Transmembrane 0808F3AED27C693B CRC64;
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RESULT 15
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X MEDLINE-9601815, pubMed-7474132;
XA Duensing T.D., Fang H., Dorward D.W., Pincus S.H.;
XI Duensing T.D., Fang H., Dorward D.W., Pincus S.H.;
XI Processing of the envelope glycoprotein gp160 in immunotoxin-
xi resistant cell lines chronically infected with human immunodeficiency
xi rulus type 1.";
XI Virol. 69:7122-7131(1995).
XI J. Virol. 69:7122-7131(1995).
XI J. Wish: 142371; AAA96326.1; -.
XI RMBL; 142371; AAA96326.1; -.
XI RMSL; 142371; AAA96326.1; -.
XI InterPro; IPR000328; Env_GP41.
XI InterPro; IPR000777; Gp120.
XI Pifam; PP00516; GP120; 1.
XI Pifam; PP00516; GP120; 1.
XI Pifam; PP00517; GP41. 1.
XI Pifam; PP00517; GP41. 1.
XI Pifam; PP00517; GP41. 1.
XI Pifam; PP00517; GP41. 1.
XI Pifam; PP00516; GP120; 1.
XI AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
XI AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
XI SEQUENCE 854 AA; 97199 MW; 5B9512216533E256 CRC64;
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Best Local Similarity 94.4
Matches 34; Conservative
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Best Local Similarity
Matches 34; Conserv
parch completed: May 16, 2003, 11:19:50
   time : 27.3124 secs
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Q78705;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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Pred. No. 9.8e-15;
2; Mismatches 0;
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US-09-082-279B-775	US-09-082-279B-771	US-08-255-208A-1	US-09-315-304B-1486	US-09-315-304B-1470	US-09-315-304B-1469	US-09-315-304B-1161	US-09-315-304B-1121	US-09-315-304B-1076	US-09-315-304B-834	US-09-315-304B-705	US-09-315-304B-631	US-09-315-304B-630	US-09-315-304B-603	US-09-315-304B-498	US-09-315-304B-497	US-09-315-304B-15	US-08-474-349A-413
Sequence 775, App	Sequence 771, App	Sequence 1, Appli			Sequence 1469, Ap		Sequence 1121, Ap	٠,	•	•	•	Sequence 630, App.	•	•	•	Sequence 15, Appl	Sequence 413, App

ALIGNMENTS

; STRANDEDNESS: ; TOPOLOGY: unk; ; MOLECULE TYPE: I US-08-073-028-1 RESULT 1 US-08-073-028-1 COUNTRY: USA ZIP: 10036 ZIP: 10036 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS OPERATING SYSTEM: PC-DOS/MS-DOS Sequence 1, Application US/08073028 Patent No. 5464933 Query Match Best Local Matches TELEPHONE: (212) 790-9090 TELEFAX: (212) 869-8864/9741 TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: 1: GENERAL INFORMATION: SEQUENCE CHARACTERISTICS: LENGTH: 36 amino acids TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090 ATTORNEY/AGENT INFORMATION: NAME: COTUZZÍ, LAURA A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78: NUMBER OF SEQUENCES: 7 CORRESPONDENCE ADDRESS: APPLICANT: Walthews, Thomas J. APPLICANT: Wild, Carl T. TITLE OF INVENTION: SYMPHETIC PEPTIDE INHIBITORS TITLE OF INVENTION: TRANSMISSION APPLICANT: TYPE: APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1993 CLASSIFICATION: 514 STREET: 1155 AV CITY: New York STATE: New York ADDRESSEE: Similarity 35; Conserv amino acid 1155 Avenue of the Americas 99.0%; ilarity 97.2%; Conservative Bolognesi, unknown Pennie & Edmonds peptide single Dani P. 1. 7872-004-999 Score 193; DB 1; Pred. No. 2.3e-17; 1; Mismatches 0 #1.25 Length 36; OF. Indels 0; Gaps

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Patent No.
                                                                                                                                                   Sequence 1, Application US/09071877 Patent No. 6015881
                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                         Query Match
APPLICANT: Lichty, Maynard
APPLICANT: Mader, Catherine
APPLICANT: Merutka, Gene
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEPTIDE SYNTHESIS
FILE REFERENCE: 7872-050
                                                                            APPLICANT: Kang, Myung-Chol
APPLICANT: Bray, Brian
APPLICANT: Lichty, Maynard
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                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: 08-486-099-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Langlois, TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: COTUZZI, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: New York
STATE: New York
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VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBARNE FUSION ASSOCIATED EVENTS, INCLUDING HEPATITIS
VENTION: B VIRUS TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (212) 869-9741/8864
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97.28;
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                                                                                                                                                                                                                                                                                                                                   Score 193; Db 5, Pred. No. 2.3e-17; "" matches 0;
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Best Local Similarity
"~+~hes 35; Conserv?
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-360-107A-1
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           Query Match
Best Local
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                    TELEFAX: (212) 869-974
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TYPE: PRT
                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: COruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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                                                                         TOPOLOGY: u
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                                                                                                                                                                                                                                                  NAME: COruzzi, Laura A. REGISTRATION NUMBER: 30, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/0 FILING DATE: 20-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                       STRANDEDNESS
                                                                                                                         TYPE:
                                                                                                                                                                                                    TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
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             Similarity
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Langlois, Alphonse J
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Barney, Shawn O.
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Matthews, Thomas
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Conservative
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97.2%;
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Thomas J.
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Pred. No. 2.3e-17;
1; Mismatches (
             Score 193;
Pred. No.
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Mismatches
             2.3e-17;
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Best Local
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                                                                                                                                  Sequence
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                                                                                                    GENERAL INFORMATION:
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                                               APPLICANT:
 APPLICANT:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/484,223B
FILING DATE: 07-UN-1995
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
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APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF
TITLE OF INVENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
TITLE OF INVENTION: TRANSMISSION
                                   APPLICANT:
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TOPOLOGY: ur
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STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
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10036-2711
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                                               Bolognesi, Dani P. Matthews, Thomas J. Wild, Carl T.
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                                                                                                                                                                                                                                                                                        Conservative
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                               Barney, Shawn O.
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Petteway, Stephen
                                                                                                                                                                                                                                                                                                                                                                                            unknown
               lambert, Dennis M.
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                                                                                                                                                                                                                                                                                                      Score 193; DB 3; Pred. No. 2.3e-17;
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                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/08475668A Patent No. 6060065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                 GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie &
                                                                                                                                                                                                            TITLE OF INVENTION:
TITLE OF INVENTION:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INHIBITION
TITLE OF INVENTION: OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                          NUMBER OF SEQUENCES:
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                                                                      COUNTRY: USA
ZIP: 10036-2711
                                                                                                        STATE:
                                                                                                                      CITY: New York
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REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
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10036-2711
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                                                                                                                                                        Pennie & Edmonds LLP
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                                                                                                                                                                                       , Stephen R.
COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING INFITRANSMISSION
211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.0%;
97.2%;
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Pred. No. 2.3e-17;
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                                                                                                                                                                                                                           EVENTS, INCLUDING INFLUENZA VIRUS
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SOFTWARE:

PatentIn Release #1.0, Version #1.30

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                     ZIP: 1003b-z/--
ZIP: 1003b-z/--
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: YSTEM: PC-DOS/MS-DOS
PC-DOS/MS-DOS
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 07-JUN-19
CLASSIFICATION: 435
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                                                                               REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                 ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WOLECULE TYPE: peptide
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                                              TELEPHONE:
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                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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                                                                                                                NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                     STATE:
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                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                     CITY: New York
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                                  66141 PENNIE
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                                              : (212) 790-9090
(212) 869-9741/8864
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Langlois, Alphonse J.
Langlois, METHODS FOR INHIBITION OF MEMBRANE
VENTION: FUSION-ASSOCIATED EVENTS, INCLUDING INFLUENZA VIRUS
VENTION: TRANSMISSION
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Lambert, Dennis M.
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Matthews, Thomas
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97.2%;
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Thomas J.
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                                                                                                    7872-023
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Pred. No. 2.3e-17;
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Best Local Similarity
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                                                                     Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-TOSYMS-DOS
SOFTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/471,913
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
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TOPOLOGY: unknown
MOLECULE TYPE: peptide
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NAME: COTUZZÍ, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
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COMPUTER READABLE FORM:
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CORRESPONDENCE ADDRESS:
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TYPE: 8
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               1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                       Similarity
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Lambert, Dennis M.
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Matthews, Thomas
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                                                                                                                                                   unknown
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alphonse J
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                                                                        Score 193;
Pred. No. 2.
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                                                            Mismatches
                                                                            DB 3;
1.3e-17;
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RESULT 10 US-08-554-616-1

pequence 1, Application US/08554616 Patent No. 6133418

GENERAL INFORMATION:

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US-08-485-264A-1
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bolognes; Dani P.
APPLICANT: Matthews, Thomas J.
APPLICANT: Wild, Carl T.
TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV
TITLE OF INVENTION: TRANSMISSION
APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF
TITLE OF INVENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
TITLE OF INVENTION: RESPIRATORY SYNCYTIAL VIRUS TRANSMISSION
NUMBER OF SEQUENCES: 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: COPUZZÍ, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
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ADDRESSEE: Pennie &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 06-NOV-1995
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35; Conservative
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                                                                                                       Barney, Shawn O.
Lambert, Dennis M.
                                                                                                                                         Bolognesi, Dani P. Matthews, Thomas J. Wild, Carl T.
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97.2%;
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Pred. No. 2.
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                                                                ; OTHER INFORMATION: Core polypeptide US-09-082-279B-15
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                                                                                                                              SOFTWARE: F
SEQ ID NO 15
LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-082-279B-15
                                                                                                                                                                                                                                                                                                                                                                                              sequence 15, Application US/09082279B
Patent No. 6258782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best
 Matches
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                 Best Local Similarity
                              Query Match
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                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                           APPLICANT: Anwer, Mohmed
APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
                                                                                                                                                                                                                                             FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
                                                                                               ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 10036-2711
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 1155 A CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
mes 35; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
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COCUZZI, Laura A.
70 NUMBER: 30,742
                                                                                                                                                                               FastSEQ for Windows Version 3.0
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Merutka, Gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (212) 869-9741/8864
Conservative
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                 99.0%;
97.2%;
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97.2%;
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     Score 193; Ub .,
No. 2.3e-17;
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Pred. No. 2.3e-17;
 Mismatches
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                              Length 36;
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1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36

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Вb

1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
FILE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOTTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 498
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-082-279B-498
; Sequence 498, Application US/09082279B
; Patent No. 6258782
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: Sequence 497, Application US/09082279B

: Patent No. 6258782
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Best Local Similarity
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RESULT 15
US-09-082-279B-603
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; OTHER INFORMATION: Core polypeptide
US-09-082-2798-498
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Best Local Similarity 97.2
Matches 35; Conservative
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SOFTWARE: FastSEQ for
EQ ID NO 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                   YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Merutka, Gene
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Merutka, Gene
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97.2%;
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Pred. No. 2.3e-17;
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Pred. No. 2.3e-17;
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Search completed: May 16, 2003, 11:22:14 Job time : 10.1928 secs
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                                                                                                                                 Query Match
Best Local Similarity 97.2
Matches 35; Conservative
                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FASTSEQ FOR WINDOWS Version 3.0
SEQ ID NO 603
SEQ ID NO 603
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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                                                                      1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                         1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603, Application US/09082279B
o. 6258782
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Merutka, Gene
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Pred. No. 2.3e-17;
1; Mismatches (
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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1 DB seq
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195
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                              /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
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2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
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score greater than or equal to the score of the result bein and is derived by analysis of the total score distribution. Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being have a ing printed

SUMMARIES

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193	193	193	193	193	193	193	193	193	193	193	193	193	193	193	193	193	193	193	Score
99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	. 99.0	99.0	99.0	99.0	Query Match Length
268	268	268	256	254	232	221	177	56	46	37	36	36	36	36	36	36	36	36	
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US-09-854-816-18	US-09-854-816-17	US-09-854-816-16	US-10-059-271-97	US-10-059-271-82	US-10-059-271-81	US-10-059-271-84	US-10-040-349B-2	US-09-779-451-4	US-09-779-451-41	US-09-848-616-176	US-09-854-816-108	US-09-854-816-1	US-09-834-628-1	US-09-779-451-5	US-09-796-202-10	US-09-493-346-1	US-10-116-797-1	US-09-874-475-16	ID
Sequence 18, Appl	17,	Sequence 16, Appl	Sequence 97, Appl	•	-		~	Sequence 4, Appli	Sequence 41, Appl	Sequence 176, App	Sequence 108, App	Sequence 1, Appli	Sequence 1, Appli	Sequence 5, Appli	Sequence 10, Appl	Sequence 1, Appli	Sequence 1, Appli	Sequence 16, Appl	Description

45	44	43	42	41	40	39	38	37	36	35	34	သ	32	31	30	29	28	27	26	25	24	23	22	21
180	180	180	181	181	181	181	183	184	184	184	185	186	187	190	190	193	193	193	193	193	193	193	193	193
92.3	92.3	92.3	92.8	92.8	92.8	92.8	93.8	94.4	94.4	94.4	94.9	95.4	95.9	97.4	97.4	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
268	267	46	847	646	619	268	269	269	268	233	268	269	1231	268	36	1186	1101	861	856	853	519	391	345	345
10	10	10	10	10	10	10	10	10	10	10	10	10	9	10	10	9	9	9	10	9	10	9	10	9
US-09-854-816-41	US-09-854-816-38	US-09-854-816-109	US-09-476-242-2	US-09-891-609-2	US-09-891-609-4	US-09-854-816-26	US-09-854-816-46	US-09-854-816-12	US-09-854-816-9	US-09-854-816-50	US-09-854-816-13	US-09-854-816-28	US-10-059-271-94	US-09-854-816-19	US-09-912-824-1	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49
41,	Sequence 38, Appl	Sequence 109, App	Sequence 2, Appli	Sequence 2, Appli	4,	26,	46,	12,	9,	Sequence 50, Appl	Sequence 13, Appl	Sequence 28, Appl		19,	Sequence 1, Appli	•	Sequence 53, Appl	Sequence 103, App	1,	33,	(0 (8) (-	ű	ю 8	Sequence 49, Appl

ALIGNMENTS

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US-10-116-797-1
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US-09-874-475-16
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LENGTH: 36
TYPE: PRT
                                    GENERAL INFORMATION:
APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING HIV-1 INFECTION
FILE REFERENCE: 64672-A
                                                                                                                                          Sequence 1, Application US/10116797 Publication No. US20030044411A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 16, Application US/09874475 Publication No. US20020182592A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Whitcomb, Jeanette
APPLICANT: Huang, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE
TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS
FILE REFERENCE: 2793/65166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Petropoulos, Christos J. APPLICANT: Parkin, Neil T.
CURRENT APPLICATION NUMBER: US/10/116,797
CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                                                                Local Similarity
les 35; Conserv
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97.2%;
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Pred. No. 1e-16;
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                                              ; NAME/KEY: PEPTIDE
; LOCATION: (1)..(36)
; OTHER INFORMATION: T-20
US-09-796-202-10
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US-10-116-797-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide US-09-493-346-1
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CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 36
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Best Local Similarity 97.2
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Best Local Similarity
Matches 35; Conserv
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 10
LENGTH: 36
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Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                               Sequence 10, Application US/09796202
Patent No. US20020068813A1
                                                                                                                                                                                                                                 APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1 TITLE OF INVENTION: Infection FILE REFERENCE: 61009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
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blication No. US20030082185A1
NERAL INFORMATION:
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                                                                                                                                 ORGANISM: unknown
                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                    9-796-202-10
                                                                                                                 FEATURE:
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Pred. No. 1e-16;
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Pred. No. 1e-16;
 Score 193; DB 10;
Pred. No. le-16;
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US-09-834-628-1
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Best Local Similarity
Matches 35; Conserv
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TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.03000003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                        Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                                                                                                    APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PEPTIDES FOR INHIBITION OF HIV INFECTION
FILE REFERENCE: 05823.0198-00000
CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
NUMBER OF SEQ ID NOS: 13
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APPLICANT: KIM, KEY-SUI
APPLICANT: JIN, BONG-SI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                                                                LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                               FEATURE:
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                     YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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Pred. No. 1e-16;
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Pred. No. le-16;
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US-09-854-816-1
                                                                                                                                                                         Sequence 108, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
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Best Local
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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les 35; Conserv
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REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: Linear MOLECULE TYPE: DP178
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FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                        TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
NUMBER OF SEQUENCES: 113
                                                                                                                                                     APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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                                        INVENTION:
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                                                                      J. Christopher Phelan
Melissa A. Starovasnik
                                                                                                               J. Kevin Judice
Robert S. McDowell
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Melissa A. Starovasnik
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                                    Constrained Helical Peptides and Methods of
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Pred. No. le-16;
1; Mismatches
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Query Match
Best Local Similarity
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                                                                                                                                ; OTHER INFORMATION: DP178c peptide US-09-848-616-176
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REGISTRATION NUMBER: 36,700
REFERENCE,DOCKET NUMBER: 91005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650,725-8674
TELEPAX: 650,725-8881
INFORMATION FOR SEQ ID NO: 108:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2:1 SEQ ID NO 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 176, A Publication No.
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Best Local Similarity
                                                                                                                                                                                                                                                                                APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Tissot, Alain
IIILE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Sebbel, Peter APPLICANT: Dunant, Nicolas
                                                                                                                                                                                                              LENGTH: 37
TYPE: PRT
                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                        FEATURE:
                    1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE DESCRIPTION: SEQ ID NO: 108
TYPE: Amino Acid TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: South San Francisco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Genentech,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09848616
o. US20030054010A1
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                                                          Conservative
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97.2%;
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97.2%;
                                                                          Score 193; DB 9; Pred. No. 1e-16;
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Pred. No. 1e-16;
                                                          Mismatches
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 37

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US-09-779-451-41
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                                                        US-10-040-349B-2
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                                                                           RESULT 12
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Sequence 2, Application US/10040349B Publication No. US20030082521A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                              SEQ ID NO 4
LENGTH: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4, Application US/09779451 Patent No. US20020094521A1
                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
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APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Wild, APPLICANT: Allay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 77
SOFTWARE: PatentIn version 3.0
10 ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn ver
                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/235,901 PRIOR FILING DATE: 2000-09-28
                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US.60/181,543 PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                   TYPE: PRT ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
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                                                                                                                           Conservative
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97.2%;
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Pred: No. 1.3e-16;
1; Mismatches 0
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Pred. No. 1.6e-16;
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; OTHER INFORMATION: polypeptide derived from US-10-040-349B-2
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; OTHER INFORMATION:
US-10-059-271-84
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US-10-059-271-81
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LENGTH: 177
TYPE: PRT
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SEQ ID NO 84
LENGTH: 221
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Best Local S
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                                                                GENERAL INFORMATION:
                                                                              Sequence 81, Application US/10059271 Publication No. US20030082208A1
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Best Local Similarity
Matches 35; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES TITLE OF INVENTION: BEING IMMOBILIZED FILE REFERENCE: ALBRE-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Polypeptide Inducing Antibodies Neutralizing HIV FILE REFERENCE: 01-078-A
APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Human immunodeficiency virus type
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                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
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                                                                                                                                                                                     131 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 166
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Charloteaux, Benoit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chevalier,
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                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                      Description of peptide
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97.2%;
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97.2%;
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pred. No. 5.3e-16;
""cmatches 0;
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                                                                                                                                                                                                                                                                         6.7e-16;
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     SEQUENCES
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CURRENT FILING DATE: 2002-01-31

PRIOR APPLICATION NUMBER: DE 101 06 295

PRIOR FILING DATE: 2001-02-02

NUMBER OF SEQ ID NOS: 97

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 81

LENGTH: 232

TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
COTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-059-271-81
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Search completed: May 16, 2003, 12:10:26 Job time: 16.759 secs
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US-10-059-271-82
                                                                                                                                                    Query Match 99.0
Best Local Similarity 97.2
Matches 35; Conservative
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Best Local Similarity 97.2%;
atches 35; Conservative
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                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                  LENGTH: 254

TYPE: PRT
ORGANIZM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: peptide
-10-059-271-82
                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
FILE REFERENCE: ALBRE-22
FILE REFERENCE: ALBRE-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: BEING IMMOBILIZED FILE REFERENCE: ALBRE-22 CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: REPKE, HEINRICH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YTSLIHSLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                         99.0%;
97.2%;
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Pred. No. 7.1e-16;
1; Mismatches 0;
                                                                                                                                                    Score 193; DB 9; 1
Pred. No. 7.8e-16;
1; Mismatches 0;
                                                                                                                                                                                           Length 254;
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Minimum DB
Maximum DB
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed.
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Gapop 10.0 , Gapext 0.5
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: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
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: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
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/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
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US-09-84-816-17-10
US-09-779-451-41
US-09-779-451-41
US-10-040-3498-20
US-10-059-271-81
US-10-059-271-81
US-10-059-271-87
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US-10-059-271-87
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US-10-059-271-87
US-10-059-271-87
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US-10-116-797-1
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Sequence 16, Appl Sequence 1, Appli Sequence 1, Appli Sequence 10, Appli Sequence 10, Appli Sequence 11, Appli Sequence 17, Appli Sequence 176, Appli Sequence 2, Appli Sequence 2, Appli Sequence 81, Appli Sequence 81, Appli Sequence 81, Appli Sequence 81, Appli Sequence 97, Appli Sequence 97, Appli Sequence 17, Appli Sequence 18, Appli Sequence 17, Appli Sequence 18, Appl
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93.3	93.3	93.3	93.8	93.8	93.8	93.8	94.4	94.9	95.4	95.4	95.4	95.9	96.9	98.5	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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	Sequence 38, Appl		Sequence 2, Appli	2	4	26,	Sequence 28, Appl	46,	12		50	9 13	94,		1,	Sequence 55, Appl	53,	103,	Sequence 1, Appli	33,		93,	8,	49	Sequence 1, Appli

ALIGNMENTS

US-09-874-475-16

GENERAL INFORMATION:

Sequence 16, Application US/09874475 Publication No. US20020182592A1

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: Sequence 1, Application US/10116797
publication No. US20030044411A1
GENERAL INFORMATION:
APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING HIV-1 INFECTION
FILE REFERENCE: 64672-A
                                                                                                                                                                                                                     US-10-116-797-1
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LENGTH: 36
TYPE: PRT
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CURRENT APPLICATION NUMBER: US/10/116,797 CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: COMPOSITIONS AND METHODS TITLE OF INVENTION: AND INHIBITORS OF VIRUS FILE REFERENCE: 2793/65166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Petropoulos, Christos
APPLICANT: Parkin, Neil T.
APPLICANT: Whitcomb, Jeanette
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; LENGTH: 36
; TYPE: PRT
; ORGANISM: HOMO sapiens
US-10-116-797-1
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                                                   ; NAME/KEY: PEPTIDE (1).(36) OTHER INFORMATION: T-20 US-09-796-202-10
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SEO ID NO 1
SEOTH 36
TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity
Matches 36; Conserva
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Best Local S
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Query Match
Best Local Similarity
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Patent No. US20020068813A1
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CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                                                                             APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1 TITLE OF INVENTION: Infection FILE REFERENCE: 61009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     equence 1, Application US/09493346 blication No. US20030082185A1 ENERAL INFORMATION:
                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 17
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APPLICANT: Maddon, Paul J
                                                                                                                                                                                                                                                                                                                                                                                                        09-796-202-10
                                                                                                                                      TYPE: PRT
ORGANISM: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Description of Artificial Sequence: T20 peptide
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 100.0%;
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 Score 195;
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                  Length 36;
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; SEQ ID NO 5
LENGTH: 36
; TYPE: PRT
ORGANISM: Human immunodeficiency virus type
US-09-779-451-5
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US-09-834-628-1
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US-09-779-451-5
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Best Local Similarity
Matches 36; Conserva
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                                                                          Matches
                                                                                         Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09834628 Patent No. US20020119922A1
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CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PEPTIDES FOR INHIBITION OF
FILE REFERENCE: 05823.0198-00000
CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Allaway, Graham P. TITLE OF INVENTION: Assay for FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: KR 00-65664 PRIOR FILING DATE: 2000-11-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: YU, YEON GYU APPLICANT: KIM, KEY-SU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                          LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Pred. No. 7.7e-17;
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Pred. No. 7.7e-17;
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US-09-854-816-108
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                                                                                                                                                                                                  Sequence 108,
                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                      atent NO. US200'201514.
GENERAL INFORMATION:
APPLICANT: Andro
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est Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: Linear
MOLECULE TYPE: DP178
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
0-854-816-1
                                                                                                                                                                                                                                                                                         1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2 TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Winpatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:

CLASSIFICATION DATA:
                                     TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Constrained Helical Peptides and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                              YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                 08, Application US/09854816
US20020151473A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                     INVENTION:
                                                                     Melissa A.
                                                                                                       J. Kevin Judice
Robert S. McDowell
                                                                                                                                             Andrew C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEE: GU.:
1 DNA Way
2 San Francisco
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James A. Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Andrew C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robert S. McDowell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Kevin Judice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 California
                                                                                     Christopher Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Christopher Phelan
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                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 195; DB 10; 100.0%; Pred. No. 7.7e-17;
                                   Constrained Helical Peptides and Methods of
                                                      Wells
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: 113
               Making Same
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APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Tissot, Alain
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 176
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                                                                                                                                     ; OTHER INFORMATION: DP178c peptide US-09-848-616-176
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Publication No. US20030054010A1
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Best Local Similarity
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Best Local (
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                                                          Matches
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                                                                                                                                                                                      TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 650/225-86
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 108:
                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                    LENGTH: 37
                                                        Match 100.0%; Score 195; Local Similarity 100.0%; Pred. No. 9 tes 36; Conservative 0; Mismatch
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Wilpatin (Genentech)

CURRENT APPLICATION DATA:
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LENGTH: 36 amino acids
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NAME: Torchia, PhD., Timoth
REGISTRATION NUMBER: 36,700
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/854,816 FILING DATE: 15-May-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
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Pred. No. 7.7e-17;
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                                                            Mismatches
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                                                                                               Length 37;
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 37

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US-10-040-349B-2
                                                                                            RESULT 12
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                                                                                                                                                                                                                                                                                                  ; ORGANISM: Human immunodeficiency virus type 1 US-09-779-451-4
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US-09-779-451-41
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               Sequence 2, Application Publication No. US200300 GENERAL INFORMATION:
                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 77
SOFTWARE: PatentIn version 3.0
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/09779451 Patent No. US20020094521A1
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Best Local
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APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
APPLICANT: Brasseur, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for I
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
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PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/235,901 PRIOR FILING DATE: 2000-09-28
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PRIOR FILING DATE: 2000-09-28
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Q ID NO 41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 46
TYPE: PRT
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                                                                                                                                                    16 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                Local Similarity
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                               Lication US/10040349B
US20030082521A1
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100.0%;
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                                                                                                                                                                                                                           Score 195; DB 10;
Pred. No. 1.2e-16;
; Mismatches 0;
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Pred. No. 1e-16;
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; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: peptide US-10-059-271-84
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                                                                                                                                              RESULT 14
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US-10-059-271-84
                                                                     Sequence 81, Application US/10059271 Publication No. US20030082208A1 GENERAL INFORMATION:
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Best Local Similarity
Matches 36; Conserv
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Best Local S
Matches 36
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 APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEF/
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: PROTEIN HAVING MULTIPLE TITLE OF INVENTION: BEING IMMOBILIZED FILE REFERENCE: ALBRE-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: DE 101 06 PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn ver
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Polypeptide Inducing Antibodies Neutralizing
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NAME/KEY: Peptide
LOCATION: (1)..(1
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                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
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T: BUDDE, ECKHARD
T: NICOLAUS, STEFAN
INVENTION: PROTEIN |
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NICOLAUS, STEFAN
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Pred. No. 4.1e-16;
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NUMBER OF SEQ ID NOS: 97
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 82
LENGTH: 254
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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SEO ID NO 81
LENGTH: 232
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: peptide
US-10-059-271-81
Search completed: May 16, 2003, 12:10:21 Job time : 16.759 secs
                                                                                                                  QΥ
                                                                                                                                       Query Match
Best Local Similarity
Thes 36; Conserve
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US-10-059-271-82
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Best Local Similarity 100.0%;
Matches 36; Conservative C
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CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
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CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide 10-059-271-82
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                                                                         100.0%; Score 195; DB 9; ilarity 100.0%; Pred. No. 6.1e-16; Conservative 0; Mismatches 0;
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Pred. No. 5.5e-16;
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147.792 Million cell updates/sec
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198
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Envelope protein g	28 fro	elope prote	ID NO. 7	polypeptic	-like/	1 core poly	1 DP178/107-1	Core polypeptide f	HIV-1	fu	rminal mutant	elope	ID NO	HIV-1 gp120 protei	8 home	IV-1 gp41 peptid	polypeptide	æ	85 c	178 ho		ce of ARV-2	SF2 virus qp1	1 (ATCC	-1 (ATCC CRL 8	ENV protein contai	teir	-1 env5b∕huma	5b protei	lope	elope protei	NO. 31 f	ID NO. 30 fro	HIV antiviral acti

ALIGNMENTS

RESULT 1 AAY89837 ID AAY8

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A new hybrid polypeptide with enhanced pharmacokinetic properties comprises enhancer sequence $\boldsymbol{\cdot}$	WPI; 2000-136792/12.	Barney S, Guthrie KI, Merutka G, Anwer MK, Lambert DM;	(TRIM-) TRIMERIS INC.		20-MAY-1998; 98US-0082279.	20-MAY-1999; 99WO-US11219.		25-NOV-1999.		WO9959615-A1.		Unidentified.		colony stimulating factor; hormone; angiogenic factor.	anti-fusogenic; differentiation factor; interleukin; interferon; .	HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral;	Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1;		Core polypeptide fragment T No. 1406.		23-MAY-2000 (first entry)		AAY89837;		AAY89837 standard; peptide; 36 AA.	

100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

AAY89837 AAU70180 ABB01245 ABB01245 ABB02830 AAU13790 AAU13790 AAU13791 AAB92245 AAB92245 AAB78237

Core polypeptide f
HIV viral envelope
viral pp178/107-1i
viral pp178/107-1i
viral core polypep
pp178-11ke/Dp107-1
pp178-11ke/Dp107-1
virus related pept
Core polypeptide T
Core polypeptide T

Disclosure; Page

45; 124pp; English

polypeptides comprising enhancer peptide

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CC especially from HIV-1, HIV-2 and SIV. The enhancer peptides are compared from the core polypeptide and the core polypeptide of any core polypeptide that they are linked to. The core polypeptides are any core polypeptide that may be introduced into a living system and that can compared from a pharmacolisically useful peptide for the treatment or compared from a growth factor, cytokine, differentiation factor, contectleukin, interferon, colony stimulating factor, hormone or compared from a growth factor, stimulating factor, hormone or compared from the core polypeptide in anti-viral and contect in the core polypeptide for the treatment or compared for contents. Sequences AXY88651-y90055 represent core compared for treatments. Sequences and for the core polypeptide fragments that can be used in the invention. Some sequences cand from butted reluments.
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The invention relates to methods of generating immunogens that elicit neutralising antibodles which target regions of viral envelope proteins such as the gpl20/gp41 (glycoprotein 120/glycoprotein 41) complex of HIV-1 (human immunodeficiency virus 1). Sequences AAU70179-AAU70198 and
                                                                                                                                 Immunogenic composition for inhibiting HIV infection, comprises viral envelope protein or its fragment exterior to viral membrane, a stabilising peptide, and optionally, viral cell surface receptor or
                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HIV viral envelope protein stabilising peptide
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                                                                                    Claim
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                                                                                                                                                                                                          WPI; 2001-626098/72
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; HIV-1; human immunodeficiency
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Pred. No. 1.4e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            virus; gp41; glycoprotein 41; gp120; envelope protein; glycoprotein 120;
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RESULT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAU70677-AAU70743 represent stabilising peptides modelling the alpha-helical regions of the ectodomain of the HIV-1 transmembrane protein to stabilise fusion-active intermediate structures, which can used as vaccine immunogens. Immunogenic compositions comprise a viral envelope protein or its fragment exterior to the viral membrane, a stabilising peptide to disrupt formation of structural intermediates
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                                                                                                              Disclosure; Page 58; 587pp; English
                                                                                                                                                                                                  Heptad repeat region peptide analogs fusion, useful for treating HIV and F
                                                                                                                                                                                                                                                                                         WPI; 2001-514829/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-SEP-2001
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                                                                                                                                                                                                                                                                                                                                                                                                        (TRIM-) TRIMERIS INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunodeficiency virus; HIV; respiratory syncytial virus; RSV;
ide; heptad repeat region; transmembrane protein; gp41; HR1; HR
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36; Conser
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No. 1.4e-17;
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The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 63.8-673 (heptad repeat region HR2) and 55.8-5.95 (heptad repeat region

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Adday Sandoo Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday Sanday San
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1245
                                                                                                                                                                                                     The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required for normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided in
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                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heptad repeat region peptide analogs useful for fusion, useful for treating HIV and Respiratory
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36; Conserv
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llarity 100.0%;
Conservative 0
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Score 198; DB 22;
Pred. No. 1.4e-17;
; Mismatches 0;
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Pred. No. 1.4e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lambert DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inhibiting virus/cells Syncytial Virus
                                                        Length
      Indels
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Gaps

XPX

21-NOV-2001

(first entry)

RESULT 6
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AAU13790 standard;

Peptide;

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RESULT 5
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                                                                                                         Query Match
Best Local S
Matches 36
                                                                                                                                                                                                                                                                                              and/or with peptides derived from them. This interaction is require normal infectivity of viruses such as RSV and HIV. The heptad repeat region peptide analogues may be used to inhibit respiratory syncytial virus (RSV) infection in a cell. They may also be used to inhibit HIV infection. The present sequence is a peptide provided the provided that the performance of the provided that the performance is a peptide provided the provided that the performance is a peptide provided the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the performance of the perf
                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-LLAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-SEP-2001
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                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                       the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heptad repeat region peptide analogs useful for fusion, useful for treating HIV and Respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-514829/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-FEB-2000; 2000US-0515965
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus; HIV; respiratory syncytial virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JAN-2002
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                                                                                                           Similarity
36; Conser
                                                                                                                                                                                                                       36 AA;
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                                                                                                           100.0%; llarity 100.0%; Conservative (
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                                                                                                                                     Score 198; DB 22;
Pred. No. 1.4e-17;
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Syncytial Virus
                                                                                                           Indels
                                                                                                                                                            Length
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                                                                                                           Gaps
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DP178-like/DP107-like peptide T-1405

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DXAXXD
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                                                                                                                             AAU13791
                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to peptides which exhibit anti-rétroviral cativity. The peptides of the invention (AAUJ2559-AAUJ4009) comprise DP178-like and DP107-like peptides. The DP178 peptide corresponds communication acids 639-673 of the transmembrane protein gp41 from human confidency virus 1 (HIV-1) isolate LAI. The DP107 peptide corresponds to amino acids 558-595 of gp41 from HIV-1LAI. The invention confidency virus 1 (HIV-1) isolate LAI. The DP107 peptide corresponds to amino acids 558-595 of gp41 from HIV-1LAI. The invention calso relates to a method of identifying compounds that inhibit the communication of or disrupts a DP107/DP178 complex. The method comprises compensed to a method of a DP107/DP178 complex, both in the presence corresponde of a test compound, in a reaction mixture containing DP107 cand DP178 peptides. The method is useful for identifying compounds, including small molecule compounds, which may themselves exhibit antifusogenic, antiviral or intracellular modulatory activity. The DP178-like/DP107-like peptides are useful to inhibit human and non-human retroviral, particularly HIV, transmission to uninfected cells. The present sequence represents one of the DP178-like/DP107-like peptides
                                                                                                                                                                                                                                                                                               Query Match
Best Local (
                                                                                                                                                                                                                                                                               Matches
DP178-like/DP107-like peptide T-1406
                                      21-NOV-2001
                                                                                                           AAU13791 standard; Peptide; 36
                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                         present sequence represents one of the invention.
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                                                                                                                                                                                                                                                                                               Local Similarity
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                                                                                                                                                                                                        YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                               Conservative
                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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V transmission; mutant; mutein.
                                                                                                                                                                                                                                                                                               Score 198; DB 22;
Pred. No. 1.4e-17;
                                                                                                                                                                                                                                                                               Mismatches
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Best Local S
Matches 36
                                                                                                                                                                                                                                                              AAB92245;
                                                                                                                                                                                                                                                                                                          AAB92245 standard; Peptide; 36
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                                                                                                                                                                                                               22-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36 AA;
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                                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiviral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino hydroxyl; thiol; hormone; growth factor; neurotransmitter.

Virus

related

peptide SEQ

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NO:1421.

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RESULT 9
AAB78237
                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
""+"hes 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active mino acid region (III) and a creactive group (II) (e.g. succinimidyl and maleimido groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Endogenous therapeutic peptides e.g. hormones, growth administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half created and specificity as bonding to large molecules decreases in the action of the present peptides which can be used in the creament of exemplification of the present journal of the present peptides of activity in the present peptides which can be used in the creament of exemplification of the present journal of the present peptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-MAY-1999;
10-SEP-1999;
15-OCT-1999;
                                                                                                   Core polypeptide; enhancer; antiviral; anti-HIV; virucide; hepatotropic; antiinflammatory; hybrid polypeptide; coiled-coil peptide interaction; fusion-related disorder; bacterial infection; viral infection.
                                           WO200103723-A1
                                                                         Unidentified
                                                                                                                                                                                                                19-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptidase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-112059/12.
                                                                                                                                                                                Core polypeptide T1405
                                                                                                                                                                                                                                                                        AAB78237 standard; Peptide; 36 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bridon DP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CONJ-) CONJUCHEM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200069900-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-MAY-2000; 2000WO-US13576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-NOV-2000
                                                                                                                                                                                                                                                                                                                                                       1
                                                                                                                                                                                                                                                                                                                                                                    1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                     YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and attaching therapeutic peptides degradation, useful for increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0134406.
99US-0153406.
99US-0159783.
                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   733pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Milner
                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                            Score 198; DB 22;
Pred. No. 1.4e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PG,
                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Holmes DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to albumin length of i
                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Thibaudeau
                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                n prevents
in vivo activity
                                                                                                                                                                                                                                                                                                                                                                                                                                               36;
                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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RESULT 10
AAB78238
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CC those exhibited by the core polypeptide when introduced into a living CC system. It is used to increase the in vitro or ex vivo half-life of CC the core polypeptide. The hybrid and core polypeptides can be used for CC modulating fusogenic events and intracellular processes involving CC criteating and/or diagnosing disorders involving fusion events (e.g. CC modulation of neurotransmitter exchange and sperm-egg fusion), CC intracellular processes involving coiled-coil peptides (e.g. bacterial infections) and viral infections that involve cell-cell and/or virus-cell fusion (e.g. viral infections caused by human CC immunodeficiency virus, respiratory syncytial virus, Epstein-Barr CC The enhancer peptide sequence increases the half-life and reduces the Cclearance rate of therapeutic peptides, which increases their efficacy and minimises the incidence and severity of adverse side effects.

CI n addition, this increases the sensitivity of the diagnostic procedure in which they are need as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
       09-JUL-1999; 99US-0350641
                                                                                                                                                                           Core polypeptide; enhancer; antiviral; anti-HIV; virucide; hepatotropic; antiinflammatory; hybrid coiled-coil peptide interaction; fusion-related c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is a core polypeptide which may be linked to an enhancer peptide to form a novel hybrid polypeptide. The hybrid polypeptide exhibits enhanced pharmacokinetic properties relative to
                                                                                                                                 Unidentified
                                                                                                                                                                                                                                     Core polypeptide T1406
                                                                                                                                                                                                                                                                                                                                 AAB78238 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 58; 151pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New hybrid polypeptide, e.g. viral infections,
                                                                       18-JAN-2001
                                                                                                                                                              bacterial infection; viral infection
                                                                                                                                                                                                                                                                   19-APR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In addition, this in which they are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polypeptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Barney S,
                                         10-JUL-2000; 2000WO-US18772
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                                                                                                                                                                                                                                                                                                                                                                                                        1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                               Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           useful for preventing, treating and comprises an enhancer peptide linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Merutka G,
                                                                                                                                                                                                                                                                                                                                 36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 198; DB 22;
Pred. No. 1.4e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anwer MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lambert DM
                                                                                                                                                                            d polypeptide; disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnostic procedure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diagnosing
to a core
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(TRIM-) TRIMERIS INC

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RESULT 11
AAB54786
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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Best Local Si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is a core polypeptide which may be linked to an enhancer peptide to form a novel hybrid polypeptide. The hybrid polypeptide exhibits enhanced pharmacokinetic properties relative to those exhibited by the core polypeptide when introduced into a living system. It is used to increase the in vitro or ex vivo half-life of the core polypeptide. The hybrid and core polypeptides can be used for modulating fusgenic events and intracellular processes involving coiled-coil peptide interactions. Other uses include preventing, treating and/or diagnosing disorders involving fusion events (e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modulation of neurotransmitter exchange and sperm-egg fusion), intracellular processes involving coiled-coil peptides (e.g. bacterial infections) and viral infections that involve cell-cell and/or virus-cell fusion (e.g. viral infections caused by human immunodeficiency virus, respiratory syncytial virus, Epstein-Barr virus, hepatitis B virus, Mason-Pfizer virus and polio virus). The enhancer peptide sequence increases the half-life and reduces the clearance rate of therapeutic peptides, which increases their efficacy and minimises the incidence and severity of adverse side effects. In addition, this increases the sensitivity of the diagnostic procedure
                                                                                                                                                                                                                           Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                          antifusogenic; mobile blood component; measles virus; MeV; SIV; simian immunodeficiency virus; human parainfluenza virus; HPIV; RSV; human respiratory syncytial virus; human immunodeficiency virus; HIV
                                                                                                                                                                                                                                                                                                                                                  HIV antiviral activity exhibiting peptide SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                    AAB54786
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB54786 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and minimises the incidence and In addition, this increases the in which they are used.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 58; 151pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New hybrid polypeptide, e.g. viral infections, o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-147136/15
                                                                   17-MAY-1999;
10-SEP-1999;
                                                                                                                     17-MAY-2000; 2000WO-US13651
                                                                                                                                                                                          WO200069902-A1
                                                                                                                                                                                                                                                                                                                                                                                     05-MAR-2001
                              (CONJ-) CONJUCHEM INC.
                                                                                                                                                                                                                                                                                                              Long lasting fusion peptide inhibitor; viral infection; antiviral;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
DP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36
Dufresne RP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA;
                                                                 99US-0134406
99US-0153406
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , useful for pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      comprises
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Boudjellab N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 198; DB 22;
Pred. No. 1.4e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     preventing, treating and diagnosing n enhancer peptide linked to a core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anwer MK,
Robitaille M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    procedure
PG;
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                                                                                                                                                                                                                                                                                                                                                                                      XEXEX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC group which is reactive with amino groups, hydroxyl groups, or thiol CC groups on blood components to form stable covalent bonds. (I) has CC anti-viral and anti-fusogenic activities. (I) inhibits viral infection CC of cells by inhibiting call-cell fusion or free virus infection or to CC reduce the level of membrane fusion events between two or more entities, CC e.g., virus-cell or cell-cell, relative to the level of membrane fusion that occurs in the absence of the peptide. (I) is useful in the CC treatment of patients who are suffering from viral infection, e.g. HIV, CC RSV, HPIV, MeV, and SIV. (I) may be administered prophylactically to previously uninfected individuals. This is useful in cases where an CC individual has been subjected to a high risk of exposure to a virus. CB by bonding of long-lived components of the blood, such as immunoglobin, CC serum albumin, red blood cells and platelets the activity is extended CC for days to weeks. This is due to improved stability in vivo and a CC reduced susceptibility to peptidase or procease degradation. This CC minimises the need for more frequent, or even continual, administration of the peptides. AAB54784 to AAB55431 represent peptides used in the CX exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A modified peptide and a reactive group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds useful for treatment of viral infections, e.g. human immunodeficiency virus
                                                                                                                                                                                                                                                                                                          HIV; gp41 protein; constrained helical peptide; HIV vaccine; antibody; viral membrane fusion; viral infeligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 6; Page 173; 211pp; English.
                                                                                                         16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                          19-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY22834 standard; Protein; 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a modified anti-viral peptide (I) comprising a peptide that exhibits anti-viral activity and a reactive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-007496/01
                              Braisted A,
                                                                                                                                                                                                    14-MAY-1998
                                                                                                                                                                                                                                       WO9820036-A1
                                                                                                                                                                                                                                                                         Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY22834
                                                                    (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                       30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                  Judice JK,
                                                                                                         97US-0876698
96US-0743698
                                                                                                                                                                97WO-US20069
                                                                                                                                                                                                                                                                                                                                                                                                       WO9820036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                  McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 198; DB 22;
Pred. No. 1.4e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ΑA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                  Phelan JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                  infectivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 36;
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                                  Starovasnik
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AAY22835
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CC Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus CC (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of fknown HIV virus strains (AAY22810, AAY22811, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptides of the invention. The constrained helical peptides are used to produce to bond, and cyclising the octapeptide in which both terminal constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of CC uses for the constrained helical peptides are in affinity purification. Other CC of ligands (particularly where complete bidding protein is not readily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local :
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                Braisted A, Wells JA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 11; Page 171-172; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                            16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                     05-NOV-1997;
                                                                                                                                                                                                                                                                                                                       vaccine; antibody; viral membrane fusion; viral infeligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                  HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY22835 standard; Protein;
                                                                                                                                                                                                           14-MAY-1998
                                                                                                                                                                                                                                                 W09820036-A1
                                                                                                                                                                                                                                                                                     Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of synthetic antibody clones from phage display libraries,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-286866/25
                                                                      (GETH ) GENENTECH INC
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36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "floppy" peptides or proteins
                                                                                                                                                                                                                                                                                                                                                                                                                        31 from WO9820036.
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                                  Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                            97US-0876698
96US-0743698
                                                                                                                                                                     97WO-US20069
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                                    McDowell RS,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 198; DB 19;
Pred. No. 1.3e-16;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A
                                    Phelan JC,
                                                                                                                                                                                                                                                                                                                                                                infectivity;
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                                    Starovasnik MA;
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RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Best Local
                                                                                                16-JUN-1997;
06-NOV-1996;
16-JUN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp4l protein, useful in vaccines for treatment and prevention
                                                                                                                                                                                                                                                                                                                           HIV; glycoprotein; gp41; antigen; helical conformation; virus-induced membrane fusion; acquired immunodeficienc
                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of infection
            Braisted AC, Wells JA;
                                                                                                                                                                    05-NOV-1997;
                                                                                                                                                                                                      07-AUG-2001
                                                                                                                                                                                                                                         US6271198-B1
                                                                                                                                                                                                                                                                          Human immunodeficiency virus type 1 clade
                                                                                                                                                                                                                                                                                                           viral envelope protein; vaccine; virucide; anti-HIV
                                                                                                                                                                                                                                                                                                                                                                            Envelope protein gp41 from HIV clade B strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABG68305 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-286866/25.
                                                               (GETH ) GENENTECH INC.
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                               Judice JK,
                                                                                              97US-049787P.
96US-0743698.
97US-0876698.
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                               McDowell RS,
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Pred. No. 1.3e-1
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                               Phelan
                                                                                                                                                                                                                                                                                                                           immunodeficiency syndrome;
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.3e-16;
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                               Starovasnik MA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  269;
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06-NOV-1996;
16-JUN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIV; glycoprotein; gp41; antigen; helical conformation; virus-induced membrane fusion; acquired immunodeficiency syndrome; viral envelope protein; vaccine; virucide; anti-HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptides have formulas given in the specification part of which are derived from a consensus sequence of gp41 derived from HTV clades A. C. D. E or O. The peptides are used to cause induction of a specific immune response, resulting in antibodies that prevent virus-induced membrane fusion. The peptides are used to treat subjects with, or at of, HTV infection, either as antifusion/anti-infection agents or,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New cyclic peptides from human immune deficiency virus gp41, useful for treatment or prevention of HIV infection, are constrained to have alpha-helical conformation \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-487624/52
New cyclic peptides from human treatment or prevention of HIV
                                                                                                   WPI; 2002-487624/52
                                                                                                                                                                        Wells
                                                                                                                                                                                                       Braisted AC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-AUG-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus type 1 clade B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Envelope protein gp41 from HIV clade B strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-OCT-2002
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                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV clade
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36; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           269 AA;
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96US-0743698.
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Pred. No. 1.3e-16;
Mismatches 0;
   immune deficiency virus gp41, infection, are constrained to
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prevention/treatment of HIV infection (i.e. acquired immunodeficiency syndrome, AIDS), e.g. prevention of mother-to-child transmission or in cases of health care accidents. The peptides can be based on specific HIV strains, e.g. breakthrough isolates of HIV that have developed during vaccine trials, so a combination of them should cover a wide range of protection. The present sequence is 9041 protein from a particular HIV clade used to derive a consensus sequence of 9p41.
                                                                                                                                                                                                                                                                                                     The invention relates to cyclic peptides (A) with a constrained helic conformation, derived from gp41 (glycoprotein 41, a viral envelope protein) protein of human immunodeficiency virus (HIV). The cyclic peptides have formulas given in the specification part of which are derived from a consensus sequence of gp41 derived from HIV clades A, C, D, E or O. The peptides are used to cause induction of a specific immune response, resulting in antibodies that prevent virus-induced membrane fusion. The peptides are used to treat subjects with, or at of, HIV infection, either as antifusion/anti-infection agency includes that the province of the peptides are used to treat subjects with or at of, HIV infection, either as antifusion/anti-infection agency includes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    alpha-helical conformation
                                                                                                                                                                                                                                                                                preferably where associated with a carrier, as an immunogen (including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Column 177-178; 175pp; English.
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В δÃ Matches Query Match Best Local 169 YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF ۲ YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF l Similarity 36; Conserv Conservative 100.0%; 0; Score 198; DB 23; Pred. No. 1.3e-16; Mismatches 204 36 0; Indels Length 0; Gaps 0

Sequence

269 AA;

Search completed: May 16, Job time: 33.4578 secs 2003, 11:12:01

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Database :
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Maximum Match 100%
Listing first 45 summaries
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SPTREMBL_21:*

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Gapop 10.0 , Gapext 0.5
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195
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                                                                                                                                                                                                                           sp_organelle:*
sp_phage:*
sp_plant:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	16	15	14	13	12	11	10	9	8	7	.თ	5	4	w	2	1	Result No.
	190	191	191	195	195	195	195	195	195	195	195	195	195	195	195	195	Score
	97.4	97.9	97.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query Match
	856	854	854	856	856	856	854	854	852	851	752	752	752	748	747	645	Length
	15	15	15	15	15	15	15	15	15	15	15	15	5	15	15	15	DB
	Q90SM7	Q78705	090178	Q74090	Q74599	092877	Q72502	Q85582	Q89797	Q78243	Q70608	Q70605	070604	Q70606	Q70607	Q993A6	ID
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45	44	43	42	41	40	39	38	37	36	35	34	ω w	32	3 <u>1</u>	30	29	28	27	26	25	24	23	22	21	20	19	18	17
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ALIGNMENTS

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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36 	Query Match 100.0%; Score 195; DB 15; Length 645; Best Local Similarity 100.0%; Pred. No. 1.7e-15; Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	NON_TER 1 1 1 SEQUENCE 645 AA; 72485 MW; B076514BE93362EC CRC64;	Pram; PF00516; GP120; 1. Pfam; PF00517; GP41; 1. AIDS; Coat protein; Envelope protein; Glycoprotein; Polyprotein; Transmembrane.	T T	processing."; Proc. Natl. Acad. Sci. U.S.A. 98:4587-4592(2001).	"Localization of CD4+ T cell epitope hotspots to exposed strands of HIV envelope glycoprotein suggests structural influences on antigen $$	MEDLING-21192672; PubMed=11287644; Surman S., Lockey T.D., Slobod K.S., Jones B., Riberdy J.M., White S.W., Doherty P.C., Hurwitz J.L.;	113 SEQUENCE FROM N.A. STRAIN=1007;	Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=11676;	01-JUN-2001 (TrEMBLrel. 17, Created) 01-JUN-2001 (TrEMBLrel. 17, Last sequence update) 01-JUN-2001 (TrEMBLrel. 19, Last annotation update) Truncated envelope glycoprotein (Fragment).	LT 1 A6 A6 A6 A6 A6 A6 A6 A6 A6 A6 A6 A6 A6

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Best Local S
Matches 36
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STRAIN=LW87-1;
MEDLINE=95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger of the strain of the strain of the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain and the strain 
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Submitted (JUL-1994)
EMBL; U12032; AAA766
                                                                                                                                 MEDLINE-95127297; PubMed-7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger
Shaw G., Kong L., Weiss S., Waters D., Gallo R., B
"Viral variability and serum antibody response in
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1996 (TrEMBLrel. 01, Creaton 01-NOV-1996 (TrEMBLrel. 11, Last of 01-DEC-2001 (TrEMBLrel. 19, Last of 01-DEC-2001) (TrEMBLrel. 19, Last of 01-DEC-2001) (Trembler).
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01-NOV-1996 (TrEMBLrel.
01-NOV-1996 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
                                        Mulder K.E.;
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Viruses; Retroid viruses; Retroviridae;
CCBI_TaxID=11676;
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                                                                   STRAIN-LW881;
                                                                                        SEQUENCE FROM
                                                                                                                                                                                                                                                                              STRAIN-LW881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases EMBL; U12034; AAA76669.1; -.
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NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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InterPro; IPR000777; GP120.
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les 36; Conser
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PF00517; GP41; 1.
Coat protein; Glycoprotein; Polyprotein; Transmembrane.
PR 747
PR 747
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AAA76668.1;
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Q70605;

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SEQUENCE
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Q70604;
Viruses; Retroid
NCBI_TaxID=11676;
                                   ENV
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J.
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Bla
"Viral variability and serum antibody response in a
infected with HIV type 1 (HTLV type IIIB).";
ALIDS Res. Hum: Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENV
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane
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InterPro;
                      Human immunodeficiency virus type
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Pfam; PF00517; GP41; 1.
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                                                                                                                                                                                                                                                                  AIDS;
                                                                                                                                                                                                                                                                                                                                            Mulder K.E.;
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Viruses; Retroid viruses; Retroviridae;
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InterPro; IPR000777; GP120.
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36; Conservative
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36; Conservative
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IPR000777;
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Pred. No. 2e-
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No. 2e-15;
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MEDLINE-95127297; PubMed-7826699; Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W., "Viral variability and serum antibody response in a laborator infected with HIV type 1 (HTLV type IIIB)."; ALDS Res. Hum. Retroviruses 10:1143-1155(1994).

laboratory worker

STRAIN=LW852;

SEQUENCE FROM N.A.

Submitted (JUL-1994)

to the EMBL/GenBank/DDBJ databases

EMBL; U12031; AAA76667.1;

Mulder K.E.

STRAIN-LW852; SEQUENCE FROM N.A.

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Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.;
"Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                          NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                     Q70608;
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STRAIN=LW87-2;
                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
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                                                                                                 AIDS;
                                                                                                                              InterPro; IPR000328; Env_GP41. InterPro; IPR000777; GP120.
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EMBL; U12035; AAA76670.1;
                                                                                                                                                                         Mulder K.E.;
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PF00517; GP41; 1.
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                                Similarity 100. 36; Conservative
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(TremBLrel. 01, Last sequence update)
(TremBLrel. 19, Last annotation updat
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Pred. No. 2e-15;
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Pred. No. 2e-15;
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Q89797;
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01-NOV-1996
01-OCT-2001
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Q78243;
Q1-NOV-1996
         MEDLINE=95127297; PubMed=7826699; Reitz M., Hall L., Robert-Guroff M., Shaw G., Kong L., Weiss S., Waters D
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MEDLINE-89352106; PubMed=2765297;
Federico M., Titti F., Butto S., Orecchia A.,
Macchi B., Mangiano N., Verani P., Rossi G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Sequence analysis of HIV-1 proviral chronically infected HUT-78 cellular J. Viral Diseases 1:40-55(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1996
01-DEC-2001
                                                                        Viruses; Retroid viruses; NCBI_TaxID=11676;
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                                                                                                                                                                                                                                                                                                                                                                                                             Borsetti A., Saggio I., Verani P., Rossi G.; "Variability of HIV-1 virus: characteristics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus type 1
Viruses; Retroid viruses; Retroviridae;
                                            STRAIN-LW90-2
                                                     SEQUENCE FROM N.A.
                                                                                   Human immunodeficiency virus type 1..
Viruses; Retroid viruses; Retroviridae;
                                                                                                                   Envelope glycoprotein
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                                                                                                                                                                                                                                                                                                                                                                                                     productive clone."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Biological and molecular characterization of producer and producer clones from HUT-78 infected with a patient HIV isc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Verani P., Rossi G.B.;
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Reitz M., Hall L., Roben
Shaw G., Kong L., Weiss
"Viral variability and s
                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                      PF00516; GP120; PF00517; GP41; 1
                                                                                                                                                                                                                                                                                                                Coat protein; Glycoprotein; Polyprotein; Transmembrane. NCE 851 AA; 96630 MW; 1A3767B9B7E98027 CRC64;
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A., Saggio I., Verani P., Rossi G.;
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Envelope protein; Glycoprotein;
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EMBL; U12053; AAA76685.1;
EMBL; U12036; AAA76671.1;
                                                              Pfam; PF00516; GP120;
Pfam; PF00517; GP41;
AIDS; Coat protein; G
SEQUENCE 854 AA; 9
                                                                                                                                              J Virol. 66:3151-3154(1992).
EMBL; M19921: AAA444992.1;
InterPro; IPRO00328; Env_GP41.
InterPro; IPRO00777; GP120.
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J. Virol. 59:284-291(1986).
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. Hum. Retroviruses 10:1143-1155(1994).
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man H.E., Koenig
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                                                                Glycoprotein;
97124 MW; ABA
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Pred. No. 2.2e-15;
; Mismatches 0;
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Pred.
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virus type 1 at amino acid 585
CD8+ A24-restricted cytotoxic 1
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01-NOV-1998 (TrEMBLrel.
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Q72502;
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                          Viruses; Retroid viruses; NCBI_TaxID=57667;
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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Viruses; Retroid viruses; Retroviridae; Lentivirus
NCBI_TaxID=11676;
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SEQUENCE FROM N.A
MEDLINE=99098984;
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Conservative (
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PubMed=9882298;
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310 H -> L (IN REF. 2).
530 A -> S (IN REF. 2).
739 G -> D (IN REF. 2).
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Q74599;
01-NOV-1996
01-NOV-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENV.
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AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human immunodeficiency virus type 1. Viruses; Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Changes in human immunodeficiency virus type 1 responsible for the pathogenicity of a multiply immunodeficiency virus (SHIV-HXBC2)."; Urrol. 73:976-984(1999).
                                                                                                                                                                                                                                              Submitted (JUN-1996) to the EMBL/GenBank/DDBJ EMBL; D86068; BAA12995.1; -. IPR000328; Env_GP41. InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=90101366; PubMed=1688473; Cloyd M.W., Moore B.E.;
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"Changes in
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                                                                                                                                                                                                                                                                                                                            STRAIN-MCK1;
                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=MCK1
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                                                                                                                                                                                                     AIDS;
                                                                                                                                                                                                                                                                                                               Iwatani Y.;
                                                                                                                                                                                                                                                                                                                                                                                        "Spectrum of Biological Properties (HIV-1) Isolates.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=11676;
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Similarity 100.0%;
36; Conservative 0
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36; Conservative
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856 AA;
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856 AA;
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97287 MW; 238042A234C56685
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Letvin N.L., Sodroski J.G.;
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Pred.
                                                                                                                        Score 195; DB 15;
Pred. No. 2.3e-15;
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. 2.3e-15;
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passaged simian-human
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01-NOV-1998
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Q74090;
                                                        immunotoxin-resistant variant T cell line.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ
EMBL; AF070521; AAC28452.1; -
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE=95074930; Fang H., Pincus S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    090178
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InterPro; IPR000328; Env_GP41
InterPro; IPR000777; GP120.
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"Spectrum of Biological Properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Viruses; Retroid
NCBI_TaxID=11676;
                                                                                                                                                                                                                               selected
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NCBI_TaxID=11676;
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                                                                                                                                                   SEQUENCE FROM N.A. Fang H., Pincus S.H.;
                                                                                                                                                                                                               "Unique insertion sequence selected with immunotoxins infected T cells.";
                                                                                                                                                                                                                                                                                                                                                                                        Envelope
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                              Pfam;
                                               Pfam;
                                                                                                                        "Spontaneous activation of human immunodeficiency virus immunotoxin-resistant variant T cell line.";
                                                                                                                                                                                                  J. Virol.
                                                                                                                                                                                                                                                                                                                                                           Human immunodeficiency virus
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                           PF00516; GP120; 1. PF00517; GP41; 1.
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PF00517; GP41; 1
Coat protein; Gl
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856 AA;
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                                                                                                                                                                                                                                                                           PubMed=7983770;
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03.1; -.
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08,
                                                                                                                                                                                                                                                                                                                                          Retroviridae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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Last sequence up
Last annotation
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Pred. No. 2.3e-15;
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update)

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36

Indels Length

Gaps

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856; 0;

673

Lentivirus

RESULT Q74090

13

AIDS; Coa SEQUENCE

protein; 854 AA;

Glycoprotein; 96885 MW; 080

n; Polyprotein; 10808F3AED27C693B

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Coat

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RESULT 15
Q78705
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Search completed: May 16, 2003, 11:19:42 time: 28.3124 secs
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Best Local Similarity 97.3
Matches 35; Conservative
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Best Local Similarity 97.2%;
Matches 35; Conservative
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078705; O1-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.

MEDILINE-96013815; PubMed=7474132;

Duensing T.D., Fang H., Dorward D.W., Pincus S.H.;

Processing of the envelope glycoprotein gp160 in immunotoxin-
resistant cell lines chronically infected with human immunodeficiency
virus type 1.";

J. Virol. 69:7122-7131(1995).

EMBL; L42371; AAA96326.1; -.

InterPro; IPR0007328; Env_GP41.

InterPro; IPR000777; GP120.

pfam; PF00517; GP120; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
NCBI_TaxID=11676;
                                                                                                                                                                                                                                        AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane. SEQUENCE 854 AA; 97199 MW; 5B9512216533E256 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Envelope glycoprotein gp120.
                                                                            1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                         97.9%; Score 191; DB 15;
97.2%; Pred. No. 6.9e-15;
tive 1; Mismatches 0;
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Pred. No. 6.9e-15;
1; Mismatches 0;
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                      /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
                                                                                                                          /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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SUMMARIES
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Result No.	Score	Query Match	Length DB	ID	Description
_	195	100.0	36 1	US-08-073-028-1	Sequence 1, Appli
2	195	100.0	36 3	-08-486-	1,
ω	195	100.0		US-09-071-877-1	1,
4	195	100.0	36 3	US-08-360-107A-1	
5	195	100.0		US-08-484-223B-1	<u>_</u>
0	195	100.0		-08-919-597-1	۲,
7	195			-08-475-6682	<u>,</u>
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9	195			US-08-471-913A-1	1,
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11	195	100.0	36 4	US-08-485-264A-1	۲,
12	195	100.0	36 4	US-09-082-279B-15	15,
13	195	100.0	36 4	US-09-082-279B-497	497,
14	195	100.0	36 4	US-09-082-279B-498	498,
15	195	100.0	36 4	US-09-082-279B-603	
16	195	100.0	36 4	US-09-082-279B-630	630,
17	195	100.0	36 4	US-09-082-279B-631	631,
18	195	100.0	36 4	US-09-082-279B-705	
19	195	100.0	36 4	US-09-082-279B-834	834,
20	195	100.0	36 4	US-09-082-279B-1076	1076,
21	195	100.0	36 4	US-09-082-279B-1121	Sequence 1121, Ap
22	195	100.0	36 4	us-09-082-279B-1161	1161,
23	195		36 4	US-08-965-056-1	1, Ar
24	195	100.0	36 4	us-08-965-056-108	
25	195	100.0	36 4	US-09-045-920-1	Sequence 1, Appli
26	195	100.0	36 4	US-08-474-349A-1	
27	195	100.0	36 4	US-08-474-349A-399	399

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29 195 100.0 36 4 US-09-315-304B-15 30 195 100.0 36 4 US-09-315-304B-497 31 195 100.0 36 4 US-09-315-304B-603 32 195 100.0 36 4 US-09-315-304B-633 33 195 100.0 36 4 US-09-315-304B-631 34 195 100.0 36 4 US-09-315-304B-631 35 195 100.0 36 4 US-09-315-304B-834 36 195 100.0 36 4 US-09-315-304B-8134 37 195 100.0 36 4 US-09-315-304B-1121 38 195 100.0 36 4 US-09-315-304B-1161 39 195 100.0 36 4 US-09-315-304B-1161 40 195 100.0 36 4 US-09-315-304B-1469 41 195 100.0 36 4 US-09-315-304B-1470 42 195 100.0 36 4 US-09-315-304B-1486 43 195 100.0 36 4 US-09-315-304B-1486 44 195 100.0 36 4 US-09-315-304B-1486 45 195 100.0 36 4 US-09-315-304B-1486 46 195 100.0 36 4 US-09-315-304B-1486 47 195 100.0 37 4 US-09-315-304B-1775
100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 36 4 U U 100.0 37 4 U 100.0 37 4 U 100.0 3
36 4 US-09-315-304B-15 36 4 US-09-315-304B-497 36 4 US-09-315-304B-603 36 4 US-09-315-304B-633 36 4 US-09-315-304B-631 36 4 US-09-315-304B-631 36 4 US-09-315-304B-103 36 4 US-09-315-304B-1121 36 4 US-09-315-304B-1121 37 4 US-09-315-304B-1161 38 4 US-09-315-304B-1161 39 4 US-09-315-304B-1161 39 4 US-09-315-304B-1469 30 4 US-09-315-304B-1470 31 4 US-09-315-304B-1470 32 4 US-09-315-304B-1486 33 4 US-09-315-304B-1470 36 4 US-09-315-304B-1470 37 4 US-09-082-279B-771 37 4 US-09-082-279B-775
4 US-09-315-304B-15 4 US-09-315-304B-498 4 US-09-315-304B-633 4 US-09-315-304B-633 4 US-09-315-304B-633 4 US-09-315-304B-633 4 US-09-315-304B-1034 4 US-09-315-304B-1121 4 US-09-315-304B-1161 4 US-09-315-304B-1161 4 US-09-315-304B-1469 4 US-09-315-304B-1469 4 US-09-315-304B-1470 5 US-09-315-304B-1486 6 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486 7 US-09-315-304B-1486
US-09-315-304B-15 US-09-315-304B-497 US-09-315-304B-630 US-09-315-304B-630 US-09-315-304B-631 US-09-315-304B-631 US-09-315-304B-1076 US-09-315-304B-1121 US-09-315-304B-1161 US-09-315-304B-1470

ALIGNMENTS

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TELEFAX: (212) 790-9090
TELEFAX: (212) 899-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: single
                                                                            US-08-073-028-1
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US-08-073-028-1
 Query Match
Best Local S
Matches 36
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                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/073,028
FILING DATE: 07-JUN-1993
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: COLUZZÍ, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                            TOPOLOGY: ur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV TITLE OF INVENTION: TRANSMISSION NUMBER OF SEQUENCES: 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Bolognesi, Dani P. APPLICANT: Matthews, Thomas J. APPLICANT: Wild, Carl T.
 y Match 100.0%;
Local Similarity 100.0%;
hes 36; Conservative 0
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                                                                                            unknown
E: peptide
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   0;
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Score 195; DB 1;
Pred. No. 5.5e-18;
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                                                                                                                                   Sequence 1, Application US/09071877 Patent No. 6015881
                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: u
MOLECULE TYPE:
-08-486-099-1
                                                                                APPLICANT: Kang, Myung-Chol APPLICANT: Bray, Brian
FILE REFERENCE:
                                 APPLICANT:
          NPPLICANT: MERUTAN, Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 1:
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS: LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                            1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
                                                Lichty, Maynard
Mader, Catherine
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Langlois, Alphonse J
                                                                                                                                                                                                                                                                                                            Conservative
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Lambert, Dennis M.
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7872-050
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                                                                                                                                                                                                                                                                                                                                                                                            peptide
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                                                                                                                                                                                                                                                                                                                          100.0%;
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Pred. No. 5.5e-18;
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Query Match
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Matches 36;
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Patent No.
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CURRENT FILLING DATE: 1998-05-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                        INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human immunodeficiency virus
                                                                            TOPOLOGY: ur
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                      TELEFAX: (212,
mer.ex: 66141 PENNIE
                                                                                                         STRANDEDNESS
                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/0 FILING DATE: 20-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
les 36; Conserv
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                                                                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
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                                                                                                                                         LENGTH:
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                Similarity
                                                                                                                           amino acid
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1155 Avenue of the Americas
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Langlois, Alphonse
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Lambert, Dennis M.
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                                                                                                                                                                                                                      (212)
                                                                          peptide
                                                                                                                                                                                                                       790-9090
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 195; DB 3;
100.0%; Pred. No. 5.5e-18;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                           Release #1.0,
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Score 195; DB 3;
Pred. No. 5.5e-18;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                            Version
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Gaps
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

US-08-484-223B-1

Patent No.

INFORMATION:

, Application US/08484223B 6020459

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US-08-919-597-1
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                                                                                                                                                                  RESULT 6
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                                                                                                              Sequence 1, Application Patent No. 6054265
                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                  GENERAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Petteway,
APPLICANT: Langlois,
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                              APPLICANT:
APPLICANT:
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APPLICANT:
                               APPLICANT:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
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NAME: COTUZZI, Laura A.
RECISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
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APPLICANT:
                 APPLICANT:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX:
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                                                                                                INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
                                                                                                                                Application US/08919597
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Petteway, Stephen R.

Langlois, Alphonse J.

VENTION: COMPOSITIONS FOR INHIBITION OF

NVENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
                                                                                                                                                                                                                                                                                                                                                                                                                               36 amino acids
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                                                                                                                                                                                                                                                                                 Conservative
                                                              Bolognesi, Dani P. Matthews, Thomas J.
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                               Barney, Shawn O.
                                              Wild, Carl T.
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Lambert, Dennis M.
Petteway, Stephen
                                                                                                                                                                                                                                                                                                                                                                                  unknown
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                                                                                                                                                                                                                                                                                                                                                             peptide
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US-08-475-668A-1
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                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
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APPLICANT: Barney
APPLICANT: Lamber:
APPLICANT: Pettew
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                          TITLE OF INVENTION:
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                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                             TITLE OF INVENTION:
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nes 36; Conservative
                                                                                                        CITY: New York STATE: New Yor
                                                                                                                     ADDRESSEE: Pennie a Dummericas
STREET: 1155 Avenue of the Americas
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ZIP: 10036-2711
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CITY: New York
                                                                                 COUNTRY:
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                                                                                                      New York
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1155 Avenue of the Americas
                                                                                      USA
                                                                                                                                                                                                          Petteway, Stephen R.
IVENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE
IVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING INFI
IVENTION: TRANSMISSION
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Pred. No. 5.5e-18;
; Mismatches 0;
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                                                                                                                                                                                                                             INCLUDING INFLUENZA VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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SOFTWARE:

PatentIn Release #1.0, Version #1.30

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Best Local Similarity 100.
Conservative
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NFORMATION FOR SEQ
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                                                                                                                                                                                                                                                                          ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                               APPLICATION NUMBER: US/01
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: METHODS FOR INHIBITION OF MEMBRANE
TITLE OF INVENTION: FUSION ASSOCIATED EVENTS, INCLUDING INFLUENZA VIRUS
TITLE OF INVENTION: TRANSMISSION
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ATTORNEY/AGENT INFORMATION:
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TELECOMMUNICATION INFORMATION:
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                                                                                  NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78
                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
              TELEX:
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STATE: New Yor
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                                TELEFAX:
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ZIP: 10036-2711
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                                  (212) 869-9741/8864
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Lambert, Dennis M.
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PENNIE
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Pred. No. 5.5e-18;
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Matches
                                                            Matches
                                                                             Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA

COUNTRY: USA

ZIP: 10036-2711

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

ACMPUTER: IBM PC compatible

ACMPUTER: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                            TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: TBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Petteway, Stephen R.
APPLICANT: Langlois, Alphonse J.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE
TITLE OF INVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING EPST
TITLE OF INVENTION: TRANSMISSION
                                                                                                                                             MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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STATE: New York
                                                                                                                                                                            STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
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mes 36; Conser
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                                                            Local Similarity es 36; Conserv
                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                          NAME: Coruzzi, Laura
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                              TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                           TELEPHONE:
                                                                                                                                                                                                             LENGTH:
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                            1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                           amino acid
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                                                                                                                                                                                                          36 amino acids
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                                                                                                                                                                                                                                                                             (212) 869-9741/8864
                                                            100.0%; ilarity 100.0%; Conservative (
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Matthews, Thomas
Wild, Carl T.
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                                                                                                                                                                                                                                                                                             (212) 790-9090
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                                                                                                                                                                                                                                                                                                                                                        Laura A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acids
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                                                            Score 195; DB 3;
Pred. No. 5.5e-18;
0; Mismatches 0;
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Pred. No. 5.5e-18;
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US-08-554-616-1
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                                                                                                                                                                                                                     Sequence
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Patent No. 6228983
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (212) 869-886
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                       GENERAL
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APPLICATION NUMBER: US 08/073,028
FILING DATE: 07-JUN-1993
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ, Laura A.
                 TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                    APPLICANT:
                                                                                                    APPLICANT:
                                                                                                                                      APPLICANT:
                                                                                                                                                      APPLICANT:
                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: COTUZZÍ, LBUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 787
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Matthews, Thomas J. APPLICANT: Wild, Carl T.
   NUMBER OF
                                                                    APPLICANT:
                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/01 FILING DATE: 06-NOV-1995
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STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
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                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                        1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                       INFORMATION:
                                                                                                                                                                                                                       Application US/08485264A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36 amino acids
Lambert, Dennis M.
Petteway, Stephen R.
Langlois, Alphonse J.
Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUIVENTION: RESPIRATORY SYNCYTIAL VIRUS TRANSMISSION
EQUENCES: 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (212) 869-8864/9741
                                                                                                                  Barney, Shawn O.
                                                                                                                                  Matthews, Thomas J. Wild, Carl T.
                                                                                                                                                                    Bolognesi, Dani P.
                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pennie & Edmonds
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                                                                                                                                                                                                                                                                                                                                                                                         Score 195; DB 4;
Pred. No. 5.5e-18;
                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
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; OTHER INFORMATION: Core polypeptide US-09-082-279B-15
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US-09-082-279B-15
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                  Query Match
Best Local Similarity
                                                                                                                                                SEQ ID NO 15
LENGTH: 36
     Matches
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
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                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/082,279B CURRENT FILING DATE: 1998-05-20
                                                                                                                                                                                                                                             APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
TELEX: 65141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                              TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: ui
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NAME: COruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 07-JUN-199
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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ZIP: 10036-2711
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STREET: 1155 Avenue of the Americas
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Anwer, Mohmed
                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09082279E
                                                                                                                                                                                                                                                                                                                                            Guthrie, Kelly
                                                                                                                                                                                                                                                                                                                                                                 Barney, Shawn
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100.0%; ilarity 100.0%; Conservative (
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                Score 195; DB 4;
Pred. No. 5.5e-18;
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Pred. No. 5.5e-18;
Mismatches 0;
   Mismatches
                                 Length 36;
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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 498
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
COTHER INFORMATION: Core polypeptide
US-09-082-279B-498
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; Sequence 498, Application US/09082279B
; Patent No. 6258782
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RESULT 15
US-09-082-279B-603
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Best Local Similarity
Matches 36; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Barney, Shawn
                                                                                                                                      Matches
                                                                                                                                                  Query Match
Best Local Similarity
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEO ID NOS: 1515
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
ITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DETWARE: FASTSEQ for Windows
D) ID NO 497
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Guthrie, Kelly
Merutka, Gene
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Merutka, Gene
Anwer, Mohmed
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                                                                                                                                      Conservative
                                                                                                                                                      100.0%;
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                                                                                                                                      0;
                                                                                                                                                      Score 195; DB 4;
Pred. No. 5.5e-18;
                                                                                                                                        Mismatches
                                                                      36
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Search completed: May 16, Job time: 11.1928 secs

2003, 11:22:09

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; FEATURE:
; OTHER INFORMATION: Core polypeptide
US-09-082-2798-603
Db.
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 603
LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 603, Application US/09082279B Patent No. 6258782
                                                                 Query Match
Best Local Similarity
Matches 36; Conserv
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                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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                                                                                                                                                                                      TYPE: PRT ORGANISM: Artificial Sequence
               1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
 1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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Guthrie, Kelly
Merutka, Gene
Anwer, Mohmed
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                                                                   Conservative
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                                                                                    100.0%; Score 195; DB 4; 100.0%; Pred. No. 5.5e-18;
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Result
No.
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Maximum DB
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Maximum Match 100%
Listing first 45 summaries
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Sequence:
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                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by score greater than or equal to the score of the and is derived by analysis of the total score di
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147.792 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1984.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1985.DAT:*
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AAW17011
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AAB52688
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                                                                                                                                                                                                                                                                                                                  distribution
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HIV-1 derived pept
SEQ ID NO. 108 fro
SEO ID NO. 1 from
Synthetic peptide
HIV-1 LAI 9941 T-2
T20/DP178 peptide
T20/DP178 peptide
                                                                                                                                                                                                                    Description
                                                                                                                                                          DP-178 derived fro DP178 corresponds
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\AR64364	364;					

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RESULT
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ID AA
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                                                                                                                                                                                                                                                            antiviral activity; DP-178; DP-107; diagnostic; human immunodeficiency virus; transmembrane protalpha helix; leucine zipper; DP-185.
07-JUN-1993;
                          07-JUN-1994;
                                                                                                                                        Modified-site
                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                      DP-178 derived from HIV-1 isolate LAI has antiviral activity.
                                                                                                                                                                                                                                                                                                                                                                             AAR64364;
                                                                                 WO9428920-A.
                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                                                  24-AUG-1995 (first entry)
                                                     22-DEC-1994
                                                                                                                                                                                              Modified-site
93US-0073028
                          94WO-US05739
                                                                                            38
/note= "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier gp. attached"
                                                                                                                                                                               /note=
                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                               "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic or macromolecular carrier gp. attached"
                                                                                                                                                                                                                                                                             protein;
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RESULT 2
AAR98398
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Best Local Similarity . 100
Matches 36; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein-protein interactions, and possess anti-vital activity. Homologues of these peptides were identified by a computer assisted peptide sequence search. The peptides inhibits transmission
                                                                                                                                                                                                                                                                                                                                                                                           DP178 corresponds
                                                                                                                                                                                                                                                                                                                                                                                                                     17-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 11; Page 132; 182pp; English
            Disclosure;
                                   isolated peptide recognised sequence search motif
                                                                                         WPI; 1996-309517/31.
                                                                                                                                                                                             06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                                                                       WO9619495-A1
                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Computer search generated synthetic peptides
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Petteway SR,
                                               Inhibiting viral transmission, isolated peptide recognised by
                                                                                                                                                      (TRIM-) TRIMERIS INC (UYDU-) UNIV DUKE.
                                                                                                                                                                                                                                                               27-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR98398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR98398 standard; peptide; 36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV transmission
                                                                                                                              Barney
                                                                                                                                                                                                                                   20-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                uninfected cells, and can also be used as type and/or subtype specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR64364 is designated DP-178, and corresponds to amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYDU-) UNIV DUKE
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                                                                                                       y SO,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tools.
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, Wild CT;
          Fig 1; 471pp; English
                                                                                                               Bolognesi DP,
, Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                             95US-0470896
94US-0360107
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                                                                                                                                                                                                                                                                                                                                                                                           to residues
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                                                                                                                 Lambert DM, Wild CT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 195; DB 16;
Pred. No. 4.1e-17;
                                                                                                                                                                                                                                                                                                                                                                                           638-673 of HIV-1(LAI) gp41.
                                                  e.g. HIV or an ALLMOTI5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 M.
                                                                                                                              Langlois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matthews
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                                                  RSV, to a cell - 107x178x4 or PL2
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                                               or PLZIP
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RESULT 3
AAW17011
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                                           Matches
                                                        Query Match
Best Local
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequences given in AAR98398-408 represent peptides which exhibit antifusogenic activity, antiviral capability and/or the ability to modulate intracellular processes involving coiled-coil peptide structures. These peptides are recognised by the ALLMOTIS, 107x178x4 and PLZIP search motifs. These peptides may be used to inhibit the transmission of a virus, pref. HIV, influenza virus, or hepatitis B virus, to a cell.
                                                                                                                                                 reverse transcriptase, viral protease, cytokine, glycosylation or viral mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication or inhibiting transmission. They may
                                                                                                                                                                                            from HIV type 1 glycoprotein 41 (gp41) transmembrane protein. The peptide corresponds to residues 638-673 of gp41. DP-178 and its derivatives are used in combination with a therapeutic agent, e.g.
                                                                                                                                                                                                                                                                           Claim 2; Figure 1; 84pp; English.
                                                                                                                                                                                                                                                                                                    Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent - useful for treatment of HIV infection, inhibiting replication or transmission of HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HIV; SIV: human; simian immunodeficiency virus; gltransmembrane; antiviral; DP-178; DP-107; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV-1 derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW17011 standard;
                                                                                                      Sequence
                                                                                                                                    also be
                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                                                                   Johnson RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW17011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                              AAW17011
                                                                                                                                                                                                                                                                                                                                                                                                                                 (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                replication;
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 100.0%;
l Similarity 100.0%;
36; Conservative
                                           36;
                                                           Similarity
                                                                                                                                      used
                                                                                                                                                                                                                                              represents a peptide designated DP-178, a peptide derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36
                                                                                                        36 AA;
                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                   Lambert DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                   in vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             peptide useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96WO-US09499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptide;
                                                        100.0%;
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                                                                                                                                 protecting against HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   type 1 LAI isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for treatment of HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 195; DB 17;
Pred. No. 4.1e-17;
                                         Score 195; DB 18;
Pred. No. 4.1e-17;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             glycoprotein 41;
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                                                                         Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inhibition;
                                                                            36;
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

RESULT 4 AAY22912

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QY
                                                                                                                                Query Match
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                                                                                                                                                             constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable forms of "floppy" peptides or proteins.
                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                               prevent viral membrane fusion or infectivity. Vaccines may contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 233-234; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-286866/25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO. 108 from W09820036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY22912;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY22912 standard; Peptide;
                                                                           Local
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                         Similarity
                                                                                                                                36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Judice JK,
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96US-0743698
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                                                                         100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36
                                                  Score 195; DB 19; Pred. No. 4.1e-17; 0; Mismatches 0;
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                                                                                       Length
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36

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Matches Query Match Best Local

l Similarity 36; Conserv

Conservative

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Score 195; DB 19; Pred. No. 4.1e-17; Mismatches

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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

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AAY22805
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                                                                   available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable forms of "floppy" peptides or proteins.
                                                                                                                                                                                                                                   infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection, other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily protein in the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of known HIV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV infortion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus (HIV). Specifically, AAY22810-Y22910 are derived from 9p41 proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 143-144;
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06-NOV-1996;
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96US-0743698.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 McDowell RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         279pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>ω</u>
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RESULT 6
AAY31955
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                                                                                                                                                                        The present sequence represents an N- and C-terminal modified peptide, designated T-20 (or DP-178), corresponding to amino acids 638-673 of the transmembrane protein gp41 of HIV-1 LAI isolate.

The invention relates to methods for the synthesis of peptides, in particular T-20 and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T20-like peptide, followed by deprotection of the side chains to yield the final T-20 or T-20-like peptide. The invention act as intermediates to inche synthesis of peptides of interest (e.g. T-20), and to particular groups of the peptide of interest. The invention of the synthesis of the peptide of interest. The intermediates in the synthesis of the peptide of interest. The
                                                       Best Local Similarity 100 Matches 36; Conservative
                                                                        Query Match
Best Local
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                              Methods of peptide synthesis, particularly used to produce T-20 or T-20 like peptides –
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-591038/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kang M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAR-1998;
01-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-SEP-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1
                                                                                                                    Sequence
                                                                                                                                                             method allows for the
                          1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bray B,
                                                                                                                                                                                                                                                                                                                                                                                                    Page 102; 120pp; English.
                                                                                                                    36 AA;
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98US-0071877.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lichty M,
                                                                         100.0%;
                                                                                                                                                               large scale,
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                                                             0;
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                                                          Score 195; DB 20; Pred. No. 4.1e-17; Mismatches 0;
                                                                                                                                                                 economical production of high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Merutka G;
                                                              Indels
                                                                                        Length
                                                                                            36;
                                                              0;
                                                              Gaps
                                                                0;
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RESULT 7 AAY31974

Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response up-regulation; chemoattractant.

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RESULT 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a peptide, designated T-20 (or CP-178), that corresponds to amino acids 638-673 of the CC transmembrane protein gp41 of HIV-1 LAI isolate. The invention CC relates to methods for the synthesis of peptides, in particular CC chain N-terminal modified T-20 (see AAY31955) and T-20-like peptides. CC The method involves synthesizing specific side-chain protected CC peptide fragment intermediates (see AAY31956-73) of T-20 or a CC T-20-like peptide on a solid support, coupling the protected CC fragments in solution to form a protected T-20 or T-20-like peptide. CC followed by deprotection of the side chains to yield the final T-20 CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC peptide fragments which act as intermediates in the synthesis of CC conomical production of high purity peptides.
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Best Local Similarity 100.0%;
Matches 36; Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIV-1 LAI gp41 T-20 peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Methods of peptide synthesis, particularly used to produce T-20 T-20 like peptides –
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01-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                      23-FEB-2001
                                                                                                                                                             AAB52655;
                                                                                                                                                                                                   AAB52655 standard;
                                                                              T20/DP178 peptide fragment #33.
                                                                                                                                                                                                                                                                                                                     1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                    YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DP-178; HIV-1 LAI; gp41; peptide synthesis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36
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                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA;
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98US-0071877.
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                                                                                                                                                                                                   Peptide; 36 AA.
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                                                                                                                                                                                                                                                                                                                                                                                     Score 195; DB 20;
Pred. No. 4.1e-17;
; Mismatches 0;
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WO200066622-A1

Human immunodeficiency

virus type 1.

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Best Local
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                     Wang
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                                                                     05-MAY-1999;
                                                                                           05-MAY-2000;
                                                                                                                  09-NOV-2000
                                                                                                                                                              Human immunodeficiency
                                                                                                                                                                                      chemoattractant.
                                                                                                                                                                                                 Antiinflammatory; formyl peptide rec
                                                                                                                                                                                                                                  T20/DP178 peptide
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                                                                                                                                                                                                                                                                                  AAB52688;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antagonist is used to modulate inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Administration of peptide agents with a sequence partial-length T20/DP178 or T21/DP107 formyl pept
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2000-656493/63
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                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                              US DEPT HEALTH & HUMAN
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                       Oppenheim
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larity 100.0%;
Conservative 0
                                                                                          2000WO-US12371
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                                                                                                                                                                                                ry; T20/DP178; gp41 ectodomain; HIV-1 fusion; receptor family; FPR; inflammatory response
                                                                    99US-0132686
                                                                                                                                                                                                                                    fragment #66.
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Pred. No. 4.1e-17;
                                              SERVICES
                       Gong W,
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                                                                                                                                                                                                inflammatory response up-regulation;
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                       Murphy
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T20/DP178
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Matches
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The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/Dp178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
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                                                                                                                                                                                                         Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor
                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                      05-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response up-regulation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                              antagonist
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                                                                                                                                                             14; Page 40; 148pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fragment #97
                                                                                                                                                                                              to modulate
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Pred. No. 4.1e-17;
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T20/DP178
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                                                                                  (the heptad repeat region), or can correspond or mimic the C-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), or the 9p41 core 6-helix bundle, which is formed by the interaction of the N- and C-helical domains of three 9p41 proteins. The peptides can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be multimerised. For example, N- and C-helical domain peptides can
                                                                                                                                                                                                             claimed peptides derived from the C-helical domain of the gp41 envelope glycoprotein from a variety of HYV-1 isolates. The invention relates to raising a neutralising antibody response to a broad spectrum of HIV (human immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or mimic the coiled coil solution structure of the N-helical domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gp41 transmembrane proximal amphipathic alpha-helical segment; core 6-helix bundle; viral entry inhibition; immunogenic; antibody; humoral response; broad spectrum vaccine; anti-HIV; envelope glycoprotein; prophylaxis; therapy.
                                                                                                                                                                                                                                                                                                                                                            Sequences AAB14532-B14534 and AAB14569-B14602 represent specifically
                                                                                                                                                                                                                                                                                                                                                                                                   Claim 13; Page 12; 97pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                     comprises administering a polypeptide capable coiled-coil solution structure -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-465959/40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JAN-1999; 99US-0115404
07-JAN-2000; 2000US-0480336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIV-1 isolate LAI gp41 C-helical domain residues 643-678 (peptide P-18).
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                be alternately linked together to form a peptide which mimics the core 6-helix bundle. Administration of the peptide(s) generates a humoral response, with the production of antibodies against \mathfrak{gp41} structures involved in viral entry. As these portions of \mathfrak{gp41} are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Raising neutralizing antibody response to human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WEIS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (WILD/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gp41 C-helical domain;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WILD C T.
WEISS C D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36
   such antibodies may be effective against a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 195; DB 21;
Pred. No. 4.1e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΑA
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RESULT 12
AAY88665
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                                          The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetto properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any core polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor, confidence in the factor, hormone or confidence in the factor. The peptides of the invention can be used for anti-fusogenic factor infection and can be used in anti-viral and cantifus factors. Sequences AAN88651-y00055 represent core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV strains and isolates. The peptide compositions may be administer; as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect uninfected cells. A composition comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of {\sf HIV}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1 HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY88665 standard; peptide; 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
among the
                                                                                                                                                                                                                                                                                                                                                          A new hybrid polypeptide with enhanced pharmacokinetic properties
                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-136792/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified
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                                                                                                                                                                                                                                                                                                                                            comprises enhancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     colony stimulating factor;
            polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
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                                                                                                                                                                                                                                                                                                          Page 21;
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                                                                                                                                                                                                                                                                                                                                              sequence
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                                                                                                                                                                                                                                                                                                            English
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Pred. No. 4.1e-17;
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                                                                                                                                   sequence linked to core polypeptides. The enhancer polypeptides are core good to be a sequence of the core polypeptides. The enhancer polypeptides are core specially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the core polypeptide that they are linked to. The core polypeptides are any core core polypeptide that they are linked to. The core polypeptides are any core core polypeptide that may be introduced into a living system and that can core function as a pharmacoligically useful peptide for the treatment or core prevention of a disease. The core polypeptides are bioactive peptides core elected from a growth factor, cytokine, differentiation factor, colony stimulating factor, hormone or completely described for the core polypeptide in anti-viral and continuity of the core polypeptide factor. The peptides of the invention can be used for confidence treatments. Sequences and form the fusogenic treatments that can be used in the invention. Some sequences cand form hybrid columns that can be used in the invention.
                                 Matches
                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                               The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are
                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 22; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                               A new hybrid polypeptide with enhanced pharmacokinetic properties comprises enhancer sequence \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-136792/12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     colony stimulating factor; hormone;
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                                                Local
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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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36; Conserv
                                                Similarity
                                                                                                                         hybrid polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Guthrie KI,
                                                                                              36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36 AA;
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                                              Score 195; DB 21; Pred. No. 4.1e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   envelope protein;
                                                          Length
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RESULT 14
AAY89135
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                                                              Matches
                                                                               Query Match
Best Local Similarity
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                                                                                                                                                                          anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A new hybrid polypeptide with enhanced comprises enhancer sequence -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon;
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                                                                                                                             Sequence
                                                                                                                                                                                                                       interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used finishibiting viral infection and can be used in anti-viral and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     colony stimulating
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                                                                                                                                                             and
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 30; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-136792/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-NOV-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09959615-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-MAY-1999;
                  1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                             form
                                                                                                                                                             hybrid polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Guthrie KI,
                                                                                                                             36
                                                              Conservative
                                                                                                                             AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0082279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US11219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       factor; hormone;
                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Merutka G, Anwer MK,
                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36
                                                                             Score 195; DB 2
Pred. No. 4.1e-1
                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     angiogenic factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pharmacokinetic properties
   36
                                                                                              DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lambert DM;
                                                                                           Length
                                                              Indels
                                                              0
                                                                                                                                                                                                                                           for
                                                              0
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RESULT 15 AAY89136

ID . AAY89136

standard;

peptide;

36

A

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Search completed: May 16, 2003, 11:12:00 Job time: 33.4578 secs
                                                                                В
                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                        The invention relates to hybrid polypeptides comprising enhancer peptide CC sequence linked to core polypeptides. The enhancer polypeptides are CC derived from various retroviral envelope (gp41) protein sequences, CC especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the polypeptide that they are linked to. The core polypeptides are any core CC polypeptide that may be introduced into a living system and that can CC function as a pharmacoligically useful peptide for the treatment or CC prevention of a disease. The core polypeptides are bioactive peptides (c) interferon, colony stimulating factor, hormone or cC angiogenic factor. The peptides of the invention can be used for cantifusogenic treatments. Sequences ANX88651-y90055 represent core polypeptide fragments that can be used in the invention. Some sequences and the invention. Some sequences and form by which columns to comprise enhancer fragments at terminal ends can be used in the invention.
                                                                                                                                                                           Query Match
Best Local S
                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV: pharmacokinetic; half-life; growth factor; cycokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; anglogenic factor.
                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                         and form hybrid polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 30; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A new hybrid polypeptide with enhanced pharmacokinetic properties comprises enhancer sequence \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-136792/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9959615-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Core polypeptide fragment T No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-MAY-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY89136;
                                                                                                  1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                           al Similarity
36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Guthrie KI,
                                                                                                                                                                                                                                     36 AA;
                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0082279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US11219.
                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Merutka G,
                                                                                                                                                             0;
                                                                                                                                                       Score 195; DB 21;
Pred. No. 4.1e-17;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anwer MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lambert DM;
                                                                                                                                                                                             Length 36;
                                                                                                                                                             Indels
                                                                                                                                                             0;
                                                                                                                                                           Gaps
                                                                                                                                                             0;
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
```

OM protein - protein search, using sw model

Run on: May 16, 2003, 11:04:54; Search time 12.1446 Seconds (without alignments) 284.970 Million cell updates/sec

Title:
Perfect score:
Sequence:

US-09-623-533A-1 195 1 YTSLIHSLIEESQNQQEKNBQELLELDKWASLWNWF 36

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: I number of hits satisfying chosen parameters: 283224 seqs, 96134422 residues

283224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	29	28	27	26	25	24	23	22	21	20	19	18	17	. 16	15	14	13	12	11	10	9	80	7	6	. 5	4	ω	2	1	Result No.
	168	170	170	172	173	173	174	174	176	176	177	177	177	177	177	178	179	179	182	183	183	186	186	186	186	195	195	195	195	Score
	•	•	•	•	88.7				•			•			•								95.4	95.4	95.4	100.0	100.0	100.0	100.0	Query Match I
	729	852	357	846	843	357	855	853	855	357	859	852	358	358	358	445	847	847	357	358	357	861	856	856	443	861	856	5	851	Length DB
	_		Ν		_	N			_	N						-	2						۳		2			N	N	. 8
	VCLJKX	VCLJBR	S21992	VCLJND	H44001	S22006	VCLJZR	S54384	VCLJA2	S22004	VCLJMN	T12016	S70417	S22000	S22002	A41621	S13289	T09448	S21996	S21998	S21994	VCLJSC	VCLJ3W	VCLJVL	C41621	VCLJLV	VCLJH3	S13288	S33985	ID
,	env polyprotein pr	protein -	⊐		protei	_		envelope polyprote	env polyprotein pr	_	protein p	glycopro	protein	protein	envelope protein g	tei	m .	glycopro	protein	protein	envelope protein g			env polyprotein pr		in	env polyprotein pr	env protein - huma	tein	Description

RESULT 3 VCLJH3

ALIGNMENTS

QY 1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36 - - - - - - - - - - - - - - - - - -	Query Match 100.0%; Score 195; DB 2; Length 854; Best Local Similarity 100.0%; Pred. No. 2e-15; Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	A;Accession: 5.1388 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-854 <obr> C;Superfamily: type E retrovirus env polyprotein</obr>	1990 ism for mononuclear phagocytes can be determined by regions \$13288; MUID:91043044; PMID:2172833	<pre>env protein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997 C;Accession: S13288 R;O'Brien, W.A.; Koyanaqi, Y.; Namazie, A.; Zhao, J.O.; Diagne, A.; Idler, K.; Zack,</pre>	RESULT 2	QY 1 YTSLIHSLIEESONQOEKNEQELLELDKWASLWNWF 36	Query Match 100.0%; Score 195; DB 2; Length 851; Best Local Similarity 100.0%; Pred. No. 2e-15; Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-851 <car> A;Cross-references: EMBL:Z11530; NID:g60192; PIDN:CAA77628.1; PID:g60199 . C;Superfamily: type E retrovirus env polyprotein</car>	submitted to the EMBL Data Library, November 1991 A;Reference number: S33979 A;Accession: S33985		RESULT 1	
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polyprotein precursor - human immunodeficiency virus

type

1 (isolate HTLV-III,

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RESULT
C41621
                                                                                                                                                                                                                                  F;517-861/PTOOULL.
F;88,136,141,146,161,165,191,202,239,240,200
F;616,621,630,642,679,755,821/Binding site:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N; Alternate names: coat polyprotein C; Species: human immunodeficiency virus A; Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nberger, J.A.; Papas, T.S.
Nature 313, 277-284, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              env polyprotein precursor - human immunc W;Alternate names: coat polyprotein C;Species: human immunodeficiency virus A;Note: host Homo sapiens (man) C;Date: 17-May-1985 #sequence_revision 1
                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Title: Nucleotide sequence of the AIDS virus, LAV. A;Reference number: A90866; MUID:85099333; PMID:2981635 A;Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R; Wain-Hobson, S.; S
Cell 40, 9-17, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
VCLJLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Title: Complete nucleotide sequence of the A; Reference number: A93353; MUID: 85111123; PM
env polyprotein P
N;Alternate names:
                                                                                                                  д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Accession: A03975
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-856 < RAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;Cross-references:
                                                                                                                                                                                                                                                                                                                       Superfamily: type E retrovirus env polypholem; superfamily: type E retrovirus env polypholem; glycoprotein; immunodeficiency; Reywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; 1-30/Domain: signal sequence #status predicted <SIC>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Note: host Homo sapiens (man)
;Date: 17-May-1985 #sequence_r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genetics:
                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                    517-861/Product: transmembrane glycoprotein #status predicted <TMM> 88,136,141,146,161,165,191,202,239,246,267,281,294,300,306,337,344,361,391,397,402,41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Keywords: AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Accession: A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accession: A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                     volecule type: DNA
psidues: 1-861 <WAI>
ross-references: GB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L-511/Product: exterior membrane glycoprotein #status predicted <EXT>
L-511/Product: transmembrane glycoprotein #status predicted <TMM>
L-856/Product: transmembrane glycoprotein #status predicted <TMM>
8.136.141.156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,
11,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -30/Domain: signal sequence #status predicted
                                                                                                                  643
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                                                                                                                                                                                                                                                                                                                                                                                                      env
                                                                                                                  YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                     YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L.; Haseltine, W.; Patarca,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    precursor
s: coat po
                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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capsid protein; coat protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sonigo,
 coat
                     human
                                                                                                                                                                                                                                                                                                                                                                                                                                       GB:K02013; NID:g326417;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #sequence_revision 17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GB:M15654; GB:K02008;
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 polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                           100
                 immunodeficiency

    human

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                                                                                                                                                                                                               .08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             coat protein; glycoprotein; immunodeficiency;
                                                                                                                                                                                                             Score 195;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 type 1,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chang, N.T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GB:K02009;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Livak, K.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cole,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 he AIDS virus,
PMID:2578615
                     virus
                                                                                                                                                                                                                                                                    carbohydrate
                                                                                                                                                                                                                                                                                                                                                                                                                                       PIDN:AAB59751.1;
                                                                                                                                                                                                             2e-15;
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                                                                                                                  678
                                                                                                                                                     36
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                 type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 856;
                                                                                                                                                                                                                            Length 861;
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Gallo, R.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                    (Asn) (covalent)
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                                                                                                                                                                                                                                                                                                                                                                                                                                       PID: g326424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (isolate LAV-la)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NID: g326383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-Jul-1999
                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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N;Contains: coat protein gp120; coat protein gp41
C;Species: human immunodeficiency virus type 1, HT
C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1988
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                                                         env polyprotein
                                                                            VCLJ3W
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precursor -

human immunodeficiency virus

type

HIV-1

#text_change

#sequence_revision 3

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N;Contains: amino enc
C;Species: human immu
A;Note: host Homo sar
C;Date: 11-Feb-1993 H
C;Accession: C41621
                                                                                                                                               A;Gene: env

C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; polyp
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp
F;1-30/Domain: signal sequence #status predicted <SIG>
F;31-51//Product: exterior membrane glycoprotein #status predicted <EXT>
F;512-856/Product: transmembrane glycoprotein #status predicted <TMM>
F;88,136,141,156,160,186,197,330,234,241,262,276,289,295,301,332,339,356,386,392,397,
F;611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Superfamily: type E retrovirus env polyprotein
C;Keywords: AIDS; capsid protein; coat protein; jlycoprotein; immunodeficiency;
F;1-251/Product: coat protein gp100 (fragment) #status predicted <GP1>
F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;424-443/Domain: transmembrane #status predicted <TMN>
F;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; A;Note: this virus was isolated from the mother's sexual part C;Genetics:
A;Gene: env
C;Superfamily: type E retrovirus env polyprotein; C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; F;1-251/Product: coat protein gp120 (fragment) #status predic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguye
Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus type
A;Reference number: A41621; MUID:92107924; PMID:1763038
A;Accession: C41621
                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references:
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
C;Accession: A03974
                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-856 <M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Title: Nucleic acid structure and expression of the A; Reference number: A93355; MUID:85111157; PMID:298210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: A03974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R; Muesing, M.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        env polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nature 313, 450-458, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N; Alternate names:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VCLJVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
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                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contains: amino end of coat protein gp41; carboxyl end Species: human immunodeficiency virus type 1, HIV-1
                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
  638
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                                             1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNW 35
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YTSLIHSLIEESQNQQEKNEQELLELDKWANLWNW
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                                                                                                                   Similarity
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                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Smith,
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                                                                                                                                                                                                                                                                                                                                                                                                             GB:K02083; NID:g555008;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                D.H.; Cabradilla,
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97.1%;
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                                                                                                                   Score 186;
Pred. No. 2
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Mismatches 0
                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PMID:2982104
                                                                                                              2.4e-14;
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                                                                                                                                                                                                                                                                                                                                                                                                             PID:g328559
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;ed <GPl>
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A;Reference number: S21990
A;Accession: S21994
A:Molecula + ----
                                                                                   C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_cha C;Accession: S21994; S70421 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; Hacke, submitted to the EMBL Data Library, July 1991 A;Description: Distinct populations of HIV-1 in blood and ce
                                                                                                                                                                                                   envelope protein gpl20/gp41 - human immunodeficiency virus type
C;Species: human immunodeficiency virus type 1, HIV-1
A;Variety: isolate 27B
  A; Molecule type: DNA
A; Residues: 1-357 <STE1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Note: host Homo sapiens (man) C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 16-Feb-1997 C;Accession: B28922
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C;Superfami
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VCLJSC
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R; Starcich, B.R.; Hahn,
Cell 45, 637-648, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-861 <GUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-856 <STA>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;Superfamily: type E retrovirus env polyprotein; superfamily: type E retrovirus env polyprotein; polyprotein; transmembrane prote; Keywords: capsid protein; coat protein; glycoprotein; polyprotein; transmembrane prote; 1-29/Domain: signal sequence #status predicted <SIG>
30-861/Product: env polyprotein #status predicted <EPP>
7.129,135,140,143,159,163,187,198,234,241,262,276,295,301,302,333,340,356,362,386,396
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                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              95.4%;
94.4%;
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Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                        in blood and cerebrospinal fluid
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                                                                                        determ
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  A; Experimental so
A; Note: submitted
                                                             A; Molecule type: DNA
A; Residues: 1-357 <ST2>
                                                                                                                        A; Reference number: A; Accession: $70422
                                                                                                                                            R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                       envelope protein gp120/gp41 - human immunodeficiency virus type 1 (patient 27L) C;Species: human immunodeficiency virus type 1; HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999 C;Accession: S70422; S21996
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                      A;Cross-references: EMBL:x61356; NID:g60181; PIDN:CAA43624.1;
                                                                                                        A; Status: preliminary
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S21998
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Best Local
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source:
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the : patient the EMBL [

Data Library,

PID:g1067129

virus

type 1

in blood and

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A;Cross-references:
C;Superfamily: type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-140, 'X', 142-312, 'X', 314-357 <STE2>
A; Cross references: EMBL: X61355; NID: 960179
C; Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X61355; NID:g60179; PIDN:CAA43622.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                   R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59. A;Title: Distinct populations of human immunodeficiency A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       envelope protein gp120/gp41 - human immunodeficiency virus type
C;Species: human immunodeficiency virus type 1, HIV-1
A;Variety: isolate 28
                                                                                                                                                                                                                                                                                         A; Reference number: A; Accession: S70425
                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-358 <STE1>
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C;Accession: S21998; S70425
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                                                                                                                                                                                                                           A; Residues: 1-222, 'X', 224-358 <STE2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession: S21998
                                                                                                                                                                                                                                              A; Molecule type: DNA
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                                        YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
YTSLIYTLIEQSQNQQEKNEQELLELDKWASLWNWF 175
                                                                                                                                                                                                                                                                      preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H.; Storch-Hagenlocher, B.; Wildemann, B.;
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                                                                                                             Similarity
                                                                                                                                                                           nces: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183 type E retrovirus env polyprotein
                                                                                        Conservative
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91.7%;
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91.7%;
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                                                                                                           Score 183; DB 2
Pred. No. 2e-14;
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RESULT 14
A41621
       C; Accession: A41621
R; Burger, H.; Weise
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C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
C;Accession: S13289
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R;Pang, S.; Vinters, H.V.; Akashi, T.; O'Brien, W.A.; Chen, submitted to the EMBL Data Library, July 1996
Reference number: Z16673
:cession: T09448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         envelope glycoprotein - human immunodeficiency virus type 1 (strain JRFL)
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 16-Jul_1999 #sequence_revision 16-Jul-1999 #text_change 24-Nov-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;O'Brien, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; E
Nature 348, 69-73, 1990
A.Title: HIV-I tropism for mononuclear phagocytes can be
A.Reference number: S13288; MUID:91043044; PMID:2172833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        env protein - human immunodeficiency virus type 1
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     Burger,
                                       :Date: 11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                       Superfamily: type E retrovirus env polyprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thatus: preliminary; translated from GB/EMBL/DDBJ
Molecule type: DNA
Residues: 1-847 <PAN>
                                                                                                                                                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                          Molecule type: DNA
Residues: 1-847 <OBR>
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                                                                                                                              polyprotein M - human immunodeficiency virus type 1 (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                        atus: preliminary
                                                                                                                                                                                                                          629
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                                                                                                                                                                                                                                                                                                                  Local
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Pred.
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Pred. No. 1.6e-13;
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No. 1.6e-13;
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 Nguyen, P.N.;
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   Gibbs, R.A.
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Search completed: May 16,

time

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A;Gene: env

A;Gene: env

C;Superfamily: type E retrovirus env polyprotein

C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; pol:
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; glycoprotein
F;1-253/Product: coat protein gp120 (fragment) #status predicted <GP1>
F;254-445/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;426-445/Domain: transmembrane #status predicted <TMN>
F;426-445/Domain: transmembrane #status predicted <TMN>
                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:X61352; NID:g60186; PIDN:CAA43616.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus A;Reference number: $70417; MUID:92144209; PMID:1738940 A;Accession: $70418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: GB:M77228; NID:g328627; PIDN:AAB03790.1; A;Note: this virus was isolated from the mother C;Genetics:
  Дb
                                          δÃ
                                                                                                                                                                             A;Cross-references: EMBL:X61352; NID:g60186 C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                          A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-333,'X',335-358 <STE2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Reference number: S21990
A; Recession: S22002
A; Molecular A:
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A.Title: Evolution of human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Steuler,
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	13-AUG-1987 (Rel. 05, C1 13-AUG-1987 (Rel. 05, L2 13-AUG-1999 (Rel. 38, L2 15-JUL-1999 (Rel. 38, L2 Envelope polyprotein GP	, -1987 -1987 -1999 pe po	(R (R Lyp	el. 09 el. 09 el. 38	Crea Last Last	Created; Last sec Last and	Created) Last sequence Last annotation GP160 precursor	ated) sequence update) cannotation update) precursor [Contains: Exterior membrane
SOS	ENV.	immun	ode :	ficier	CV V	irus	type 1	isolate
R O O	Viruse NCBI_T	s; Re axID=	tro 116	id vi: 84;	uses	,. %	Viruses; Retroid viruses; Retroviridae; NCBI_TaxID-11684;	le; Lentivirus.
RR	SEQUENCE FROM N.A. MEDLINE=85111123;	CE FR E=851	111 111	N.A. 23; Pt	bMed.	125 125	78615;	ם לכונים ביים ביים ביים ביים ביים ביים ביים ב
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P R R	Wong-Staal F.; "Complete nucleotide sequence Nature 313:277-284(1985).	taal ete n 313:	F.; ucl 277	eotide -28 4 (1	seq1	ueno	0	S virus, HTLV-III.";
388	This SI	WISS-	PRO e S	SWISS-PROT entry	y is	col	copyright. I	It is produced through a collaboration nformatics and the EMBL outstation -
888	the Europe use by r	ropea y no ed an	д-р р-п-в	ean Bioinfo non-profit and this st	formatics t instit statement	ics titu ent	matics Institute. Th institutions as long tement is not removed	. There are no res long as its content moved. Usage by a
88	entiti or sen	es re d an	qui ema		lice lice	nse	license@isb-sib.ch).	ee http://www.isb-sib.cl
D R C	EMBL;	K0201	1;	K02011; AAA446	61.1;			
DR R	GlycoSuiteDB; P04582;	uįteD	B;	P04582	13 .7 -	ì		
DR DR	InterPro;	ro; I	PRO	IPR000328; IPR000777;	Env_GP4: GP120.	_GP,		
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior |
glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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                                     "Assignment of intrachain disulfide bonds and characterization potential glycosylation sites of the type 1 recombinant human immunodeficiency virus envelope glycoprotein (gp120) expressed Chinese hamster ovary cells.";
J. Biol. Chem. 265:10373-10388(1990).
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RESULT 3
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MEDLINE-87299196; PubMed-3040055;
Retner L., Fisher A., Jagodzinski L.L., Mitsu Gallo R.C., Wong-Staal F.;
"Complete nucleotide sequences of functional virus.";
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use by non-profit institutions as long a
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Submitted (APR-1997) to the
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., GP160 precursor [Contains: Exterior membrane
.; Transmembrane glycoprotein (GP41)]
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es; Retroviridae; Lentivirus
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Envelope polyprotein GP160 precursor [Contains: glycoprotein (GP120); Transmembrane glycoprotein
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                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type 1 (HXB3 isolate) Viruses; Retroid viruses; Retroviridae; Lentivirus NCBI_TaxID=11707;
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                                                                                                                                                                                                                                                                                                                                 Viruses;
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lycoprotein (GP120); Transmembrane glycoprotein
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es; Retroid viruses; Retroviridae; Lentivirus.
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055; AAA76690.1; -.
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Pfam; PF00517; GP41;
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotein; Glycoprotein; Transmembrane;
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MEDILINE-85099333; PubMed-2981635;

Main-Hobson S., Sonigo P., Danos O., Co.

"Nucleotide sequence of the AIDS virus,

Cell 40:9-17(1985).
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HIV; M33943; ENV$MFA.
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein Gp160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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InterPro; IPR000777; GP120.
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MEDLINE=90317877; PubMed=1695254;
MEDLINE=90317877; Haggerty S., Lamoni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus type 1 (MFA isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=11704;
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EMBL; X01762; CAA25903
PIR; A03974; VCLJVL.
HIV; K02083; ENV$PV22.
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Farrell K., Wong-Staal F., Gallo R.C., I
"Envelope sequences of two new United SI
Virology 164:531-536(1988).

-i- MISCELLANEOUS: THE SC ISOLATE WAS T/
1984 IN SOUTHERN CALIFORNIA.
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Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
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P31872;
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Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., I
"Identification and characterization of conserved aregions in the envelope gene of HTLV-III/LAV, the label.";
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Virol. 64:4016-4020(1990).
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polyprotein GP160 precursor (Contains: Exterior membrane
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Envelope polyprotein GP160 precursor [Contains: glycoprotein (GP120); Transmembrane always ENV.
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InterPro; IPR000777; GP120.
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R.
Salahuddin S.Z., Wong-Staal F., Gallo R.C., Par
"Genetic variation in HTLV-III/LAV over time in
at risk for AIDS.";
Science 232:1548-1553(1986).
-!- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND WMJ
BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A TWO
WAS PERINATALLY INFECTED BY HER MOTHER.
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01-OCT-1989 (Rel. 12, Created)
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
91ycoprotein (GP120); Transmembrane glycoprotein
                                                                   Human immunodeficiency virus type 1 (JH3 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus. NCBI_TaxID=11694;
             Komiyama N., Hattori N., Inoue J., Sakuma S. "Nucleotide sequences of gag and env genes o HIV-1 and their expression in bacteria."; AIDS Res. Hum. Retroviruses 5:411-419(1989).
                                            SEQUENCE FROM N.A. MEDLINE=89352108; PubMed=2669897;
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    Farrell K., Wong-Staal F.,
"Envelope sequences of two
Virology 164:531-536(1988).
-i- MISCELLANEOUS: THE MN I
PATIENT IN 1984.
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HIV;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11696;
[1]
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00516; GP120;
Pfam; PF00517; GP41;
AIDS; Coat protein; P
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Gurgo C., Guo H.-G.,
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InterPro; IPR000777; GP120.
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M17449; ENV$MN
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G., Franchini G., Aldovini A., Collalti E.,
Staal F., Gallo R.C., Reitz M.S. Jr.;
es of two new United States HIV-1 isolates.";
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Result
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DP-178 derived fro DP178 corresponds HIV-1 derived pept SEQ ID NO. 108 fro SEQ ID NO. 1 from Synthetic peptide HIV-1 LAI gp41 T-2 T20/DP178 peptide T20/DP178 peptide T20/DP178 peptide
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Viral core polypep	B0197	22	36	9	9	
al core polype	BB01	22	36	99.0	193	
al DP178/107-1	B0141	22	36	9.	9	
ral DP178/107-1	B0139	22	36	9.	9	
1 DP178/107-1	B0139	22	36	9.	9	
bel	118	22	36	9.	9	
al DP178/107	B0114	22	36	9.	9	
al DP178/107-1	BB0110	22	36	9.	9	
al DP178/107-1	B0083	22	36	9.	9	
al DP178/107-1	90	22	36	9.	9	
al DP178/107-1	ABB00627	22	36	9.	9	
ral DP178/107-1	90	22	36	9.	9	
F1 protein DP	8	22	36	9.	9	
ral DP178/107-1	2	22	36	9.	9	
al DP178/107-1	B004	22	36	9.	9	
l DP178/107-1	\sim	22	36	9.	9	
otin-labelled	8	22	36	9.	9	
-1 gp41 peptid	ABB00024	22	36	9	9	
-1 gp	70	22	36	9.	9	
i-HIV pe	29	22	36	9.	9	
B2 tra	9	22	36	9.	9	
IV viral envelop	701	22	36	9.	9	
re polypeptide	999	21	36	9.	9	
re polypeptide	999	21	36	9.	9	
re polypeptide	268A	21	36	9.	9	
ore polypeptide	97	21	36	9.	9	
ore polypeptide	897	21	36	9.	9	
re polypeptide	968	21	36	9	9	
re polypeptide	894	21	36	9.	9	
re polypeptide	892	21	36	9.	9	
re polypeptide	891	21	36	φ.	9	
re polypeptide	891	21	36	9	9	
e poly	87	21	36	9	9	
re polypeptide	Y886	21	36	9	9	
HIV-1 isolate LAI	145	21	36	9	9	

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ALIGNMENTS

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07-JUN-1993;	07-JUN-1994;	22-DEC-1994.	WO9428920-A.		MOUTITEG-21CE			Modified.Sice	Key		Synthetic.	***************************************	alpha helix: le	human immunode	antiviral activ	DP-178 derived		24-AUG-1995 (first entry)		AAR64364;	AAK64364 Stand	RESULT 1 AAR64364
93US-0073028.	94WO-US05739.			or macromolecular carrier gp. attached"	Jo Jootes "ontionally has a carbovy) amido hydrophobic		9-fluorenylmethoxy-carbonyl, hydrophobic or	/motor "ontionally has an amino agental	Location/Qualifiers			CARCA CHARACTER HOUSE	alpha helix: lencine zinner: DP-185	human immunodeficiency virus: transmembrane protein: qu41:	vitue DD-178: DD-107: diagnostice HTV-11AT.	DP-178 derived from HIV-1 isolate LAI has antiviral activity.		first entry)			AAK64364 Standard; Peptide; 36 AA.	

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RESULT 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR64364 is designated DP-178, and corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein 9p41. It forms a putative alpha helix at the C-terminal end of the 9p41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein protein interactions, and possess anti-viral activity. Homologues of these peptides were identified by a computer assisted peptide sequence search. The peptides inhibits transmission to uninfected cells, and can also be used as type and/or subtype specific
                                                                                                                                                                                                                                                                                                                                        Antifusogenic activity; antiviral capability; coiled-coil peptide; ALLMOTI5; 107x178x4; .PLZIP search motif; viral transmission; HIV; influenza virus; hepatitis B virus.
                                   Inhibiting viral transmission, isolated peptide recognised by sequence search motif
                                                                                       WPI; 1996-309517/31
                                                                                                                  Matthews
                                                                                                                             Barney SO,
                                                                                                                                                                                             06-JUN-1995;
20-DEC-1994;
                                                                                                                                                                                                                                   20-DEC-1995;
                                                                                                                                                                                                                                                             27-JUN-1996.
                                                                                                                                                                                                                                                                                       WO9619495-A1.
                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                           DP178 corresponds
                                                                                                                                                                                                                                                                                                                                                                                                                     17-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR98398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR98398 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnostic tools.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HIV transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Computer search generated synthetic peptides -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-036105/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Barney SO,
Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYDU-) UNIV DUKE
                                                                                                                                                     (TRIM-) TRIMERIS INC. (UYDU-) UNIV DUKE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       l Similarity
35; Conser
                                                                                                                  ŢĮ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bolognesi
, Wild CT;
         Fig 1; 471pp; English
                                                                                                               Bolognesi DP,
Petteway SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                             95US-0470896.
94US-0360107.
                                                                                                                                                                                                                                   95WO-US16733
                                                                                                                                                                                                                                                                                                                                                                                           to residues 638-673 of HIV-1(LAI) gp41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.0%;
97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lambert
                                                                                                                 Lambert DM, Wild CT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 193; DB 16; Pred. No. 6.1e-17;
                                               e.g. HIV or
an ALLMOTI5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                              Langlois AJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matthews
                                                 RSV, to a cell - using , 107x178x4 or PLZIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     are inhibitors
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

36

Matches

l Similarity 35; Conser

Conservative

Indels

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Gaps

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RESULT 3
AAW17011
ID AAW1
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                     Query Match
Best Local
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequences given in AAR98398-408 represent peptides which exhibit antifusogenic activity, antiviral capability and/or the ability to modulate intracellular processes involving coiled-coil peptide structures. These peptides are recognised by the ALLMOTI5, 107x178x4 and PLZIP search motifs. These peptides may be used to inhibit the transmission of a virus, pref. HIV, influenza virus, or hepatitis B virus, to a cell.
                                                                                                                                                                                                                                                                                                                                          Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent – useful for treatment of HIV infection, esp. by inhibiting replication or transmission of HIV.
                                                                                Sequence
                                                                                                                                         reverse transcriptase, viral protease, cytokine, glycosylation or viral mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication or inhibiting transmission. They may
                                                                                                                                                                                                   AAW17011 represents a peptide designated DP-178, a peptide derived from HIV type 1 glycoprotein 41 (gp41) transmembrane protein. The peptide corresponds to residues 638-673 of gp41. DP-178 and its derivatives are used in combination with a therapeutic agent, e.g. a
                                                                                                                                                                                                                                                                                                        Claim 2; Figure 1; 84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type 1 LAI isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV; SIV: human; simian immunodeficiency virus; glycoprotein 41;
transmembrane; antiviral; DP-178; DP-107; vaccine; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-1 derived peptide useful for treatment of HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUN-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW17011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW17011 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                    also be used in vaccines for protecting against HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Johnson RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TRIM-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         replication; transmission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transmembrane; antiviral; DP-178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
35; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRIMERIS INC
                                                                                36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lambert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-0481957.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96WO-US09499
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97.2%;
                   99.0%;
97.2%;
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Pred. No. 6.1e-17;
1; Mismatches 0,
Score 193; DB 18;
Pred. No. 6.1e-17;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AΑ
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                                      Length 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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RESULT 4 AAY22912

AAY22912,

AAY22912 standard; Peptide;

36

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                                                                        Matches
                                                                                         Query Match
Best Local
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                                                                                                                                                                                               of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable
                                                                                                                                                                                                                                                                      infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of the constrained helical peptides are in affinity purification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO.
                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 233-234; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Braisted A, Judice JK,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC.
1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                         Similarity
                                                                                                                                                                              "floppy"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 108
                                                                                                                                               36 AA;
                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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96US-0743698
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97WO-US20069
                                                                                                                                                                               peptides
                                                                                       99.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          McDowell RS,
                                                                                                                                                                               or proteins.
                                                                                       Score 193; DB 19;
Pred. No. 6.1e-17;
                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phelan JC,
                                                                        0,
                                                                                                       Length
                                                                        Indels
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                                                                        Gaps
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В Qγ

Query Match Best Local Matches

Local Similarity res 35; Conser

Conservative

99.0%; 97.2%;

Score 193; DB 19; Pred. No. 6.1e-17;

Length 36; Indels

Mismatches

0

0,

Gaps

0;

1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

36

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RESULT 5
AAY2805
ID AAY2
XX
AC AAY2
XY
DT 19-A
XX
DE SEQ
XX
VACC
KW VACC
KW VACC
KW Liga
XX
Liga
XX
Liga
XX
HUV
XX
HUM
XX
HUM
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HUM
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HUM
XX
HUM
XX
HUM
XX
HUM
XX
HUM
XX
A1-P
XX
A1-P
  XX
X
                                                                                                                                           (HTV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY22810, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds. The constrained helical peptides are used to treat or prevent HIV infection, especially as vaccines that generate antibodies that constrained helical peptides are used to treat or prevent strains of the constrained helical peptides are used to treat or prevent strains of constrained helical peptides are used to treat or prevent strains of the constrained helical peptides are used to treat or prevent strains of the constrained helical peptides are infectivity. Vaccines may contain the constrained helical peptides are in affinity purification. Other uses for the constrained helical peptides are in affinity purification.
                                                           of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency virus gp41 protein, useful in vaccines for treatment and prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIV: gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY22805;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-MAY-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-AUG-1999
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 143-144; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Braisted A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC
                                      "floppy" peptides
  36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Judice JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
  AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0876698.
96US-0743698.
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                                      or proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Phelan JC,
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                                                             for isolation or as stable
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RESULT 6
AAY31955
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                                                                                                                                                                                                                                                                                     The present sequence represents an N- and C-terminal modified peptide, designated T-20 (or DP-178), corresponding to amino acids CC 638-673 of the transmembrane protein gp41 of HIV-1 LAI isolate. CC The invention relates to methods for the synthesis of peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 or T-20 
                                                                                                            Query Match
Best Local Similarity
Matches 35; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-591038/50
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01-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY31955
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                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                    purity peptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods of peptide synthesis, particularly used to produce T-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kang M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAR-1999;
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     Н
                                                       1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             peptide T-20 (DP-178).
                                                                                                                                                                                                                  36 AA;
                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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98US-0071877
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note= "N-terminal acetyl"
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                                                                                                                                  99.0%;
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                                                                                                                                  Score 193; DB 20; Length 36; Pred. No. 6.1e-17;
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                                                                                                            Mismatches
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RESULT 7 AAY31974

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AAB52655
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Tq
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                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T-20-like peptide, followed by deprotection of the side chains to yield the final T-20 or T-20-like peptide. The invention also relates to individual peptide fragments which act as intermediates in the synthesis of peptide fragments which act as intermediates in the synthesis of peptide fragments which act as intermediates in the synthesis of the peptide of interest. The method allows for the large scale, economical production of high purity peptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents a peptide, designated T-20 (or DP-178), that corresponds to amino acids 638-673 of the transmembrane protein gp41 of HIV-1 LAI isolate. The invention relates to methods for the synthesis of peptides, in particular C- and N-terminal modified T-20 (see AAY31955) and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates (see AAY31956-73) of T-20 or a peptide fragment intermediates (see AAY31956-73) of T-20 or a
Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response up-regulation; chemoattractant.
                                                                                                                23-FEB-2001 (first entry)
                                                                          T20/DP178 peptide fragment #33.
                                                                                                                                                                                           AAB52655 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Methods of peptide synthesis, particularly used to produce T:20 T-20 like peptides \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-591038/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kang M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TRIM-) TRIMERIS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAR-1998;
01-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T-20; DP-178; HIV-1 LAI; gp41; peptide synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV-1 LAI gp41 T-20 peptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY31974 standard; Peptide; 36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9948513-A1
                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 35; Conserv
                                                                                                                                                                                                                                                                                      1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                            36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 9; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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98US-0071877.
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                                                                                                                                                                                                                                                                                                                                                                                    99.0%;
97.2%;
                                                                                                                                                                                             <u>3</u>6
                                                                                                                                                                                                                                                                                                                                                                                  Score 193; DB 20;
Pred. No. 6.1e-17;
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                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                      Length 36;
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RESULT 9
AAB52688
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Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a. critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
                                                                                                                                                                                                                                                                                                           AAB52688 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antagonist is used to modulate inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang
WPI; 2000-656493/63
                                                                                                                                                                                                                                                                                   AAB52688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                              Human immunodeficiency virus
                                                                                                                                                                                                Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 formyl peptide receptor family; FPR; inflammatory re
                                                                                                                                                                                                                                                           23-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               partial-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Administration
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                                                                    05-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunodeficiency virus type 1.
                                            US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 24; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oppenheim
                     Oppenheim
                                                                                                                                                                                                                                  peptide
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                                                                                                                                                                                                                                                           (first entry)
                                                                                         2000WO-US12371.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of peptide agents with a sequence correspondin T20/DP178 or T21/DP107 formyl peptide receptor
                                                                   99US-0132686.
                                                                                                                                                                                                                                  fragment
                                                                                                                                                                                                                                                                                                        Peptide;
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                            Score 193; DB 21;
Pred. No. 6.1e-17;
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                     Murphy PM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
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                                                                                                                                                                                              response
                                                                                                                                                                                                           fusion;
                                                                                                                                                                                                up-regulation;
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AAB52818
ID AAB5
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AC AAB5
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DT 23-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
                                       The present sequence is a peptide fragment of T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent
                                                                                                                                                                                                                                 WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                        Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antiinflammatory; T20/DP178; formyl peptide receptor famil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 12; Page 25; 148pp; English
                                                                                                                                             Claim
                                                                                                                                                                                                                                                            Wang JM,
                                                                                                                                                                                                                                                                                                                                                   05-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                09-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chemoattractant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T20/DP178 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB52818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB52818 standard;
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                                                                                                                                                                                                                                 2000-656493/63
                                                                                                                                             14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 97. 35; Conservative
                                                                                                                                                                                                                                                                                          SD
                                                                                                                                                                                                                                                              Oppenheim JJ,
                                                                                                                                             Page 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36
                                                                                                                                                                                                                                                                                                                                                 2000WO-US12371
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptor family; FPR; inflammator.
                                                                                                                                                                                                                                                                                                                      99US-0132686
                                                                                                                                                                                                                                                                                          HEALTH &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fragment #97.
                                                                                                                                          148pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide;
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97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        is a peptide fragment of T20/DP178. T20/DP178 is a
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                                                                                                                                                                                                                                                                                          HUMAN
                                                                                                                                             English.
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                                                                                                                                                                                                                                                                                         SERVICES
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                                                                                                                                                                                                                                                           Gong W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B; DB 21;
6.1e-17;
                                                                                                                                                                                                                                                              Gao
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                                                                                                                                                                                                                                                           Murphy PM;
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              CC of HAV (human immunodeficiency virus) strains and isolates, comprising CC the administration of a peptide which corresponds to or minics highly CC conserved portions of gp41 which are important in mediating the process CC of viral entry into host cells. Such peptides can correspond to or CC mimic the coiled coil solution structure of the N-helical domain CC (the heptad repeat region), or can correspond or mimic the C-helical common (the transmembrane-proximal amphipathic alpha-helical segment), CC or the gp41 core 6-helix bundle, which is formed by the interaction CC of the N- and C-helical domains of three gp41 proteins. The peptides CC can be administered either singly or as a combination (particularly a CC combination of N-helical and C-helical peptides), and can be combination of N-helical and C-helical domain peptides can CC be alternately linked together to form a peptide which mimics the CC core 6-helix bundle. Administration of the peptides against gp41 are well control of the peptides against gp41 are well control of the period of the period of the peptides and control of the peptides against gp41 are well control of the period of the peptides against gp41 are well control of the period of the peptides against gp41 are well control of the peptides against gp41 are well control of the peptides against gp41 are well control of the peptides against gp41 are well control of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period of the period 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequences AAB14532-B14534 and AAB14569-B14602 represent specifically claimed peptides derived from the C-helical domain of the gp41 envelope glycoprotein from a variety of HIV-1 isolates. The invention relates to raising a neutralising antibody response to a broad spectrum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Raising neutralizing antibody response to human immunodeficiency virus comprises administering a polypeptide capable of forming a stable coiled-coil solution structure -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gp41 transmembrane-proximal amphipathic alpha-helical segment;
core 6-helix bundle; viral entry inhibition; immunogenic;
antibody; humoral response; broad spectrum vaccine; anti-HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JAN-1999; 99US-0115404
07-JAN-2000; 2000US-0480336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV-1 isolate LAI gp41 C-helical domain residues 643-678
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 envelope glycoprotein; prophylaxis; therapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (WILD/) WILD C T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-JAN-2000; 2000WO-US00456
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gp41 C-helical domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WEISS C D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 12; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Weiss CD;
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may be
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  effective
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range
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                                                                                   The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor, interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for the interferon and can be used for any total and
               inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAY88651-y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Retrovirus; hybrid polypeptide; enhancer; gp41; envelope proteir HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV strains and isolates. The peptide compositions may be administered as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect uninfected cells. A composition comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV
                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 21; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-136792/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 colony stimulating factor; hormone; angiogenic factor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAY-2000 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                          hybrid polypeptide with enhanced ises enhancer sequence -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Guthrie KI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36 AA;
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97.2%;
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Pred. No. 6.1e-17;
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                                                                                                                                                                                                                                                                                                                                                                                               pharmacokinetic properties
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lambert DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     envelope protein;
factor; cytokine;
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RESULT 13
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                                                                                                   The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are CC derived from various retroviral envelope (gp41) protein sequences, CC especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the CC polypeptide that they are linked to. The core polypeptides are any CC polypeptide that may be introduced into a living system and that can CC function as a pharmacoligically useful peptide for the treatment or CC prevention of a disease. The core polypeptides are bioactive peptides core cC selected from a growth factor, cytokine, differentiation factor, CC interleukin, interferon, colony stimulating factor, hormone or CC angiogenic factor. The peptides of the invention can be used for CC anti-fusogenic treatments. Sequences AAY88651-99055 represent core CC among those indicated also comprise enhancer fragments at terminal ends comprise of and form hybrid nolvonentiaes.
                                                                                                                                                                                                                                                                                                                                                                                      PS
    Matches
                  Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 22; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV: pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusgenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; angiogenic factor.
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                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-136792/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
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omprises enhancer sequence -
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                                                                                              form hybrid polypeptides
                  Similarity
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                                                                36 AA;
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    Conservative
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97.2%;
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Pred. No. 6.1e-17;
Score 193; DB 21;
Pred. No. 6.1e-17;
1; Mismatches 0;
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1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

AAY89136

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AAY89136 standard;

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1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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Matches
                    Query Match
Best Local S
                                                                                                                              interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor,
                                                                                                                                                                                                                                                                                                    The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (g941) protein sequences, especially from HIV-1 HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A new hybrid polypeptide with enhanced comprises enhancer sequence -
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                                                                            Sequence
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                    Similarity
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                                                                            36 AA;
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                  99.0%;
97.2%;
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                    Score 193; DB 21;
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Mismatches
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                                                    Query Match
Best Local Similarity y,...
Thes 35; Conservative
                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A new hybrid polypeptide with enhanced pharmacokinetic properties comprises enhancer sequence \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cycokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; anglogenic factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 30; 124pp; English.
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                                                                                                                                                                                                                     and form hybrid polypeptides.
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1 YTSIIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                   Score 193; DB 21;
Pred. No. 6.1e-17;
1; Mismatches 0;
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Search completed: May 16, 2003, 11:12:05 Job time: 33.4578 secs

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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                   Score
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length: 2000000000
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        362588 seqs, 96450795 residues
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197
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: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep: *
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/cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
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US-09-79-451-5

0 US-09-834-628-1

0 US-09-854-816-1

0 US-09-854-816-108

0 US-09-848-616-176

0 US-09-779-451-41

0 US-09-779-451-4
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US-10-059-271-84

US-10-059-271-81

US-10-059-271-82

US-10-059-271-97
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US-10-116-797-1
US-09-493-346-1
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      US-09-854-816-16
US-09-854-816-17
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220.333 Million cell updates/sec
sequence 10, Appl
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sequence 176, App
sequence 176, App
sequence 27, Appli
sequence 2, Appli
sequence 2, Appli
sequence 84, Appl
sequence 84, Appl
sequence 81, Appl
sequence 81, Appl
sequence 97, Appl
sequence 17, Appl
sequence 17, Appl
sequence 17, Appl
sequence 18, Appl
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Sequence 1, Appli
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US-09-854-816-109	US-09-854-816-46	US-09-854-816-43	US-09-854-816-41	US-09-854-816-38	US-09-854-816-12	US-09-854-816-9	US-09-854-816-50	US-09-854-816-13	US-10-059-271-94	US-09-476-242-2	US-09-891-609-2	US-09-891-609-4	US-09-854-816-26	US-09-854-816-19	US-09-912-824-1	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	US-10-040-349B-1
109,	Sequence 46, Appl	-	41,	•		9, 2	50,	Sequence 13, Appl		2	'n		26,	19		Sequence 55, Appl	53,			ω ,				49,	Sequence 1, Appli

ALIGNMENTS

US-09-874-475-16

Sequence 16, Applica Publication No. US20 GENERAL INFORMATION:

Application US/09874475 No. US20020182592A1

APPLICANT: Petropoulos, Christos J. APPLICANT: Parkin, Neil T. APPLICANT: Whitcomb, Jeanette APPLICANT: Huang, Wei

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECE TITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS FILE REFERENCE: 2793/65166

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                                                                                                                                                          US-10-116-797-1
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 36
TYPE: PRT
                                                                                                Sequence 1, Application US/10116797
Publication No. US20030044411A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 35; Conserv
CURRENT
                                 APPLICANT: Olsen, William C. APPLICANT: Maddon, Paul J. TITLE OF INVENTION: METHODS FOR INHIBITING FILE REFERENCE: 64672-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/874,475 CURRENT FILING DATE: 2001-06-04
                                                                                                                                                                                                                           1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
APPLICATION NUMBER: US/10/116,797 FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                      Conservative
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97.2%;
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Pred. No. 2.2e-16;
1; Mismatches 0;
                                                  HIV-1 INFECTION
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GTHER INFORMATION: T-20
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; ORGANISM: Homo sapiens
US-10-116-797-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide us-09-493-346-1
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Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/493,346
CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PATENTIN VEY: 2.0
SEQ ID NO 1
                                                                                                                                                                             APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin version 3.0
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 97.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.1 SEQ'ID NO 1
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                               Sequence 10, Application US/09796202 Patent No. US20020068813A1
                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Requence 1, Application US/09493346 ablication No. US20030082185A1 ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Olson, William C
APPLICANT: Maddon, Paul J
TITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1
TITLE OF INVENTION: Infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 61009
                                                                                                                                                  LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                  )9-796-202-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                 ORGANISM: unknown
                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity hes 35; Conserv
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97.2%;
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   97.5%;
97.2%;
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Pred. No. 2.
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Pred. No. 2.2e-16;
 Score 192;
Pred. No. 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
   2; DB 10;
. 2.2e-16;
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                 Length 36;
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GENERAL INFORMATION:
APPLICANT: Wild, Carl T.
APPLICANT: Wild, Carl T.
APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inh
FILE REFERENCE: 1900.030003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US/09/35,901
PRIOR FILING DATE: 2000-09-28
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR APPLICATION DATE: 2000-02-10
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В
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US-09-834-628-1
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                                                                                                                                               US-09-834-628-1
                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:

APPLICANT: VIU, YEON GYU

APPLICANT: KIM, KEY-SUN

APPLICANT: JIN, BONG-SUK

TITLE OF INVENTION: PEPTIDES FOR INHIBITION

FILE REFERENCE: 05823.0198-00000

CURRENT APPLICATION NUMBER: US/09/834,628

CURRENT FILING DATE: 2001-04-16

CURRENT FILING DATE: 2001-04-16
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LENGTH: 36
                                                                                        Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: KR 00-65664 PRIOR FILING DATE: 2000-11-06 NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 77
SOFTWARE: PatentIn version 3.0
                                                                                                                                                              OTHER INFORMATION: Description OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                      FEATURE:
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                   1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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5:
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35; Conserv
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                                                                        Conservative
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97.2%;
                                                                                      97.5%;
97.2%;
                                                                                        Score 192;
Pred. No. 2
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Pred. No. 2.2e-16;
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                                                                        Mismatches
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                                                                                    DB 10;
?.2e-16;
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                                                                                                         Length 36;
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                                                                        Indels
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RESULT 8
US-09-854-816-108
Sequence 108, Application US/09854816
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                                                                                                                                                                                            Patent No. US20020151473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/09854816 Patent No. US20020151473A1 GENERAL INFORMATION:
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Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9-854-816-1
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 08/965,056
FILING DATE: CUNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: TOZCHIA, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECHMUNICATION INFORMATION:
TELEPHONE: 650/255-8674
TELEFRAX: 650/952-9881
                                                                                                                                                                                                                                                                                                                                 1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: Linear
MOLECULE TYPE: DP178
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/854,816
ETILING DATE: 15-May-2001
CLASSIFICATION: -Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                  NUMBER OF SEQUENCES:
                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: South San Francisco
STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 36 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
James A. Wells
INVENTION: Constrained Helical Peptides and Methods of
Making Same
Prescription: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   James A. Wells INVENTION: Constrained Helical Peptides and Methods of
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                                                                                                                                                                          Andrew C. Braisted
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Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasník
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                                                                                          Melissa A. Starovasnik
                                                                                                                                   J. Kevin Judice
Robert S. McDowell
                                                                                                            Christopher Phelan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
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    Mismatches

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Pred. No. 2.2e-16;
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Query Match
Best Local Similarity
Trans 35; Conserve
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                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 176
LENGTH: 37
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                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
                                                                                                                                                                                                                                                                                              APPLICANT: Lechner, Franziska
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Sebbel, Peter APPLICANT: Dunant, Nicolas
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO: 108: SEQUENCE CHARACTERISTICS:
                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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APPLICATION NUMBER: 08/965,056
FILING DATE: CINENTON:
ATTORNEY_AGENT INFORMATION:
NAME: Torchia, PhD., Timothy E
REGISTRATION NUMBER: 36,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE DESCRIPTION: SEQ ID NO: 108:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-8674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: South San F. STATE: California
                                                                                                                                                                                                                                                                                                                                                    Bachmann, Martin
Tissot, Alain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
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                   Conservative
                                   97.5%;
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97.2%;
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                 Score 192; DB 9;
Pred. No. 2.3e-16;
1; Mismatches 0
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Pred. No. 2.2e-16;
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                                                      DB 9;
                                                    Length 37;
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1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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                                                                                                                                           Вb
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US-09-779-451-41
                                                                                     RESULT 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Human immunodeficiency virus type US-09-779-451-41
GENERAL INFO
                Sequence 2, Application US/10040349B Publication No. US20030082521A1 GENERAL INFORMATION:
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Patent No. US20020094521A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 4
LENGTH: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 41, Application US/09779451 Patent No. US20020094521A1
                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
                                                                                                                                                                                                                                                                                                                                                                        RIOR APPLICATION NUMBER: US 60/181,543 RIOR FILING DATE: 2000-02-10 NUMBER OF SEQ ID NOS: 77 SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
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TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2000-09-28
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Q ID NO 41
LENGTH: 46
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                                                                                                                                       16 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 51
                                                                                                                                                                                                                  Local Similarity nes 35; Conserv
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 Brasseur, Robert
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97.2%;
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Pred. No. 3.5e-16;
1; Mismatches
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2.9e-16;
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US-10-059-271-81
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US-10-059-271-84
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                                                                                                                                                 RESULT 14
                                                                    Sequence 81, Application US/10059271 Publication No. US20030082208A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                 Query Match 97.5
Best Local Similarity 97.5
Matches 35; Conservative
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SEQ ID NO 84
LENGTH: 221
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Publication No.
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             APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/040,349B CURRENT FILING DATE: 2002-07-09 NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: DE 101 06
PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 177
TYPE: PRT
ORGANISM: Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Polypeptide Inducing Antibodies Neutralizing
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LOCATION: (1)...(177)
OTHER INFORMATION: polypeptide derived
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                         131 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 166
                                                                                                                                                                                                                            YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 139
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OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BUDDE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Charloteaux, Benoit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chevalier, Michel
El Habib, Raphaelle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/10059271
10. US20030082208A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ECKHARD
                                                                                                                                                                                                                                                                                                                                                                            Description of Artificial Sequence: Synthetic peptide
PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
                                                                                                                                                                                                                                                                                                 97.5%;
97.2%;
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97.2%;
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Pred. No. 1.5e-15;
1; Mismatches
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Pred. No. 1.2e-15;
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FILE REPERENCE: ALBRE-22

CURRENT APPLICATION NUMBER: US/10/059,271

CURRENT FILING DATE: 2002-01-31

PRIOR APPLICATION NUMBER: DE 101 06 295

PRIOR FILING DATE: 2001-02-02

NUMBER OF SEQ ID NOS: 97

SOFTWARE: PATENTIN Ver. 2.1

SEQ ID NO 82

LENGTH: 254

TYPE: PRT
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PRIOR FILING DATE: 2001-02-02

; NUMBER OF SEQ ID NOS: 97
; SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 81
; LENGTH: 232

TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: peptide
US-10-059-271-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
US-10-059-271-82
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Search completed: May 16, 2003, 12:10:24 Job time: 15.759 secs
                                                                                                                              Query Match
Best Local Similarity 97.2
Watches 35; Conservative
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Best Local Similarity 97.18
Natches 35; Conservative
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Publication No. US20030082208A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
                                                                                                                                                                                                                         ORGANISM: Artificial Sequence FEATURE:
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide
-10-059-271-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
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Pred. No. 1.6e-15;
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Pred. No. 1.7e-15;
1; Mismatches 0
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Result
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1: /cgn2_6/ptodata/1
2: /cgn2_6/ptodata/1
3: /cgn2_6/ptodata/1
4: /cgn2_6/ptodata/1
5: /cgn2_6/ptodata/1
6: /cgn2_6/ptodata/1
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Match
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197
1 YTNLIHSLIEESQNQQ
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103.919 Million cell updates/sec
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/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
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US-09-082-279B-630
US-09-082-279B-705
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US-09-082-279B-834
US-09-082-279B-1121
US-09-082-279B-1121
US-09-082-279B-1161
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US-08-484-223B-1

US-08-919-597-1

US-08-475-668A-1

US-08-485-551A-1

US-08-485-551A-1

US-08-554-6161

US-08-554-6161

US-08-682-279B-15
                  US-08-965-056-1
US-08-965-056-108
US-09-045-920-1
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                                                          -082-279B-1076
-082-279B-1121
         -474-349A-1
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603, App
630, App
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1076, Ap
1121, Ap
1161, Ap
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	37	37	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
	4 US-09-082-279B-775	4 US-09-082-279B-771	4 US-08-255-208A-1	4 US-09-315-304B-1486	4 US-09-315-304B-1470	4 US-09-315-304B-1469	4 US-09-315-304B-1161	4 US-09-315-304B-1121	4 US-09-315-304B-1076	4 US-09-315-304B-834	4 US-09-315-304B-705	4 US-09-315-304B-631	4 US-09-315-304B-630	4 US-09-315-304B-603	4 US-09-315-304B-498	4 US-09-315-304B-497	4 US-09-315-304B-15	4 US-08-474-349A-413	
	Sequence 775, App	Sequence 771, App	Sequence 1, Appli	Sequence 1486, Ap	Sequence 1470, Ap	Sequence 1469, Ap	Sequence 1161, Ap	Sequence 1121, Ap		Sequence 834, App					Sequence 498, App		Sequence 15, Appl	Sequence 413, App	

ALIGNMENTS

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RESULT 1
US-08-073-028-1
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 Best Loc
Matches
                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                      APPLICANT: Bolognesi, Dani P.
APPLICANT: Matthews, Thomas J.
APPLICANT: Mild, Carl T.
TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF
TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                        MOLECULE TYPE: peptide
                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
                                                                                      TOPOLOGY: unl
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TELEX: 66141 PENNIE
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 Local Similarity 97.1 ies 35; Conservative
                                                                                                                                                                                                        TELEPHONE:
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COTUZZI, Laura A.
COTUZZI, Laura A.
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97.2%;
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Score 192; DB 1;
Pred. No. 3.4e-17;
1; Mismatches 0
                           Length 36;
 Indels
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RESULT 3
US-09-071-877-1
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US-08-486-099-1
                                                                                                                           GENERAL
                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 97.3
Matches 35; Conservative
                                                                                                                                       Sequence 1, Application US/09071877 Patent No. 6015881
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APPLICANT: Merutka, Gene
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEPTIDE SYNTHESIS
FILE REFERENCE: 7872-050
                                                                                        APPLICANT: Kang, Myung-Chol APPLICANT: Bray, Brian
                                                      APPLICANT: Lichty, Maynard APPLICANT: Mader, Catherine
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MOLECULE TYPE:
08-486-099-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 10036-2711
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                                                                                                                       INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                      amino acid
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Langlois, Alphonse J
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Lambert, Dennis M.
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SYSTEM: PC-DOS/MS-DOS
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97.2%;
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   Best Local Similarity Matches 35; Conserv
    Matches
                               Query Match
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TYPE: PRT
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                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0.
                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION: NAME: Coruzzi, Laura A.
                                                                            MOLECULE TYPE:
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les 35; Conserv
                                                                                          TOPOLOGY:
                                                                                                       STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: New York
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(212) 869-9741/8864
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Langlois, Alphonse
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Lambert, Dennis M.
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                                                                                            unknown
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                                                                                                                                                                                    PENNIE
                 97.5%;
97.2%;
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97.2%;
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of the Americas
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Score 192; DB 3;
Pred. No. 3.4e-17;
1; Mismatches 0
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Pred. No. 3.4e-17;
1; Mismatches 0;
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                                Length 36;
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                                                                                                                                                                   RESULT 6
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                                                                                                  Sequence 1, Application Patent No. 6054265
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (212) 869-9741/88
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                APPLICANT:
                                                                 APPLICANT:
APPLICANT:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: un
MOLECULE TYPE:
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   APPLICANT:
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nes 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: COTUZZI, Laura A. REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/484,223B FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: New York
STATE: New York
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                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
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                                                                                                                                                                                                                1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                  Application US/08919597
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                                                                                                                                                                                                                                                                                                                                                                                                                                36 amino acids
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Langlois, Alphonse J.
IVENTION: COMPOSITIONS FOR INHIBITION OF
IVENTION: MEMBRANE FUSION-ASSOCIATED EVENTS,
VENTION: TRANSMISSION
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                                                               Bolognesi, Dani P. Matthews, Thomas J.
                                                                                                                                                                                                                                                                                 Conservative
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 Petteway,
                                  Barney, Shawn O.
                                                 Wild, Carl T.
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Lambert, Dennis M.
Petteway, Stephen
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97.2%;
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Best Local Similarity
Matches 35; Conserv
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT:
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PRIOR APPLICATION NUMBER:
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TELECOMMUNICATION INFORMATION:
TELLEPHONE: (212) 790-999
TELEFAX: (212) 869-9741/8864.
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                 TITLE OF INVENTION: TITLE OF INVENTION:
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                              NUMBER OF SEQUENCES:
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STREET: New York
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VENTION: METHODS AND COMPOSITIONS FOR INHIBITION
VENTION: OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV
VENTION: TRANSMISSION
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Lambert, Dennis M.
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97.2%;
                                                                                                                                                                                                                                COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING INFLUENZA VIRUS
                                                                                                                                                                                                                   TRANSMISSION
                                                                                                                                                                                                                                                                       Stephen R
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                  NFORMATION FOR SEQ
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APPLICANT: Langlois
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPAX: (212) 869-9741/8864
TELEX: 66141 PENNIE
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FORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090 TELEFAX: (212) 869-9741/8864
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CORRESPONDENCE ADDRESS:
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                                                                                                                         NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30
                                                                                                                                                                                                  APPLICATION NUMBER: US/08/485,551A FILING DATE: 07-JUN-1995
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                                                                                                           REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
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                                  66141 PENNIE
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Langlois, Alphonse J.
Langlois, Alphonse FOR INHIBITION OF MEMBRANE
VENTION: FUSION-ASSOCIATED EVENTS, INCLUDING
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Lambert, Dennis M.
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97.2%;
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                                                                                                                         30,742
                                                                                                           7872-023
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Pred. No. 3.4e-17;
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Best Local :
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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tes 35; Conserv
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TELEX: 66141
                                                                                                                                                                                                                                                                                                                            NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742
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                                                                                                                                                       TOPOLOGY: unknown
                                                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                              1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
Similarity
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                                                                                                                                                                                    amino acid
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1155 Avenue of the Americas
                                                                                                                                                                                                      36 amino acids
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                                                                                                                                                                                                                                                                   (212) 869-9741/8864
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Matthews, Thomas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                              Conservative
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                                                                                                                                      peptide
                                                                                                                                                                                                                                                   PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING EPS
                                                                           97.5%;
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97.2%;
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Pred. No. 3.4e-17;
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                                                                          Score 192; DB 3; Pred. No. 3.4e-17;
                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INCLUDING EPSTEIN-BARR VIRUS
                                                                                          Length 36
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US-08-554-616-1; Sequence 1, A

Patent No. 61334

Application US/08554616

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                                                                                                                                                                                                               Patent No. 6228983
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                                                                                                                                                                                                GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                               ery Match
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TOPOLOGY: unk
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: COTUZZI, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/073,028
FILING DATE: 07-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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                TITLE OF INVENTION: TITLE OF INVENTION:
                                                                        APPLICANT:
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ADDRESSEE: Pennie & Edmonds
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                                                                                                                                            APPLICANT:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ITLE OF INVENTION: SYNTHETIC PERIOD ITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS /VG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/554,616 FILING DATE: 06-NOV-1995
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STATE: New York
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Petteway, Stephen R.
Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
VENTION: RESPIRATORY SYNCYTIAL VIRUS TRANSMISSION
EQUENCES: 232
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                                                                                                         Lambert, Dennis M.
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97.2%;
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Pred. No. 3.4e-17;
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APPLICANT: Barney, Shawn
APPLICANT: Guthrie, Kelly
APPLICANT: Merutka, Gene
APPLICANT: Anwer, Mohmed
APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
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                                                                    ; OTHER INFORMATION: Core polypeptide US-09-082-279B-15
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                                                                                                                 SOFTWARE: FastSEQ for Windows
SEQ ID NO 15
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15, Appli
Patent No. 6258782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 35; Conserv
                     Query Match
Best Local :
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INFORMATION FOR SEQ ID NO: 1:
                                                                                                          FEATURE:
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APPLICATION NUMBER: US/0
FILING DATE: 07-JUN-1995
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OPERATING SYSTEM:
SOFTWARE: Patent:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78
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   Local Similarity
les 35; Conserv
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1155 Avenue of the Americas
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(212) 869-9741/8864
   Conservative
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              97.5%;
97.2%;
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97.2%;
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                  Score 192;
Pred. No.
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Pred. No. 3.4e-17;
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3.4e-17;
0;
                                     DB 4;
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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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CURRENT APPLICATION NUMBER: US/09/082,279B;
CURRENT FILING DATE: 1998-05-20;
NUMBER OF SEQ ID NOS: 1515;
SOFTWARE: FastSEQ for Windows Version 3.0;
SEQ ID NO 498;
LENGTH: 36;
TYPE: PRT
ORGANISM: Artificial Sequence;
FEATURE:
OTHER INFORMATION: Core polypeptide.
US-09-082-279B-498
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SOFTWARE: FastSEQ for Windows Version 3.0; ID NO 497; LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
RESULT 15
US-09-082-279B-603
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                                                                                                                                                  Query Match
Best Local Similarity
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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                                                              1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Guthrie, Kelly
Merutka, Gene
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Merutka, Gene
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                                                                                                                                    Conservative
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97.2%;
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                                                                                                                                      Mismatches
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SEQ ID NO 603
LENGTH: 36
                                                                                                   Query Match
Best Local Similarity 97.2
Matches 35; Conservative
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                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                                                                                                                                                                              TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
                                          1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
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Guthrie, Kelly
Merutka, Gene
Anwer, Mohmed
                                                                                                                                                                                                                                                                                             FastSEQ for Windows Version 3.0
                                                                                                                              97.5%;
97.2%;
2003,
11:22:12
                                                                                                                                Score 192; DB 4;
Pred. No. 3.4e-17
                                                                                                                Mismatches
                                                                                                                                               Length 36;
                                                                                                                Indels
                                                                                                                  0
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0;

Search completed: May 16, Job time: 10.1928 secs

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                         Database :
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                            ll number of hits satisfying chosen parameters:
                                                                                                                                                                                 SPTREMBL_21:*
1: sp_archea:*
2: sp_bacteria:*
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197
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Gapop 10.0 , Gapext 0.5
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                                               sp_plant:*
sp_rodent:*
sp_virus:*
sp_vertebrate:*
sp_unclassified:*
sp_rvirus:*
sp_bacteriap:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

16	15	14	13	12	11	10	9	8	7	6	ъ	4	ω	2	1	Result No.
188	188	188	192	192	192	192	192	192	192	192	192	192	192	192	192	Score
95.4	95.4	95.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	Query Match 1
854	684	122	856	856	856	854	854	852	851	752	752	752	748	747	645	Length
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	BG
090178	Q91K06	80xx60	Q74090	Q74599	092877	Q72502	Q85582	089797	Q78243	Q70608	Q70605	Q70604	270606	Q70607	Q993A6	ID
human	Q9ik06 human immun	Q9yxq8 human immun	Q74090 human immun	Q74599 human immun	3		human	Q89797 human immun	human	Q70608 human immun	· Q70605 human immun	Q70604 human immun	Q70606 human immun	Q70607 human immun	Q993a6 human immun	Description

45	44	43	42	41	40	39	38	37	36	35	34	ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
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Q9EA89	080863	Q69990	Q9Q722	Q993B2	Q993B0	6WXX60	092937	071974	Q90SM7	Q9IJZ4	Q91K07	Q91K08	Q9IK09	Q91K10	Q91K11	Q9YP48	Q9WJU4	Q9IJY7	8ALI6Ö	Q9IJY9	Q9IJZ0	Q91K03	Q91K04	Q9IK05	Q9YP50	Q9YP43	Q91K00	Q78705
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human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human	human
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ALIGNMENTS

Oy 1 Y Db 607 Y	Query Match Best Local Matches 3	SQ SEQUENCE	Transi	DR Pfam;	Pfam;								RP SECTIONS		OC Viruse		GN ENV.				ID Q993A6	RESULT 1 Q993A6
YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWE	97.5%; Similarity 97.2%; 5; Conservative	CE 645 AA; 72485 MW;	mbrane.	PF00517; GP41; 1.		FO: IPRUUU328; ENV_GP41	Natl. Acad. Sci. U.S.A.	processing.";	HTV envelone alvooprotein suggests structural	White S.W., Doherty P.C., Hurwitz J.L.;	Surman S., Lockey T.D., Slobod K.S., Jones	MEDLINE=21192672; PubMed=11287644;	TE FROM N.A.	NCBI_TaxID=11676;	Viruses; Retroid viruses; Retroviridae; Lentivirus	Human immunodeficiency virus	ENV.	red envelope alventet. 19,	(TrEMBLiel. 17,	(TrEMBLrel. 17,	PRELIMINARY;	
JELDKWASLWNWF 36 ELDKWASLWNWF 642	Score 192; DB 15; Le Pred. No. 4.9e-15; 1; Mismatches 0; 1	B076514BE93362EC		 Envelope protein: Glycoprotein: Polyprotein: 		I.	. 98:4587-4592(2001).) † 1	В.,	37644;	٠		troviridae; Lentivirus.	type 1.	ern (rrayment).	rasc annocation update)	Last sequence update)	Created)	PRT; 645 AA.	
	Length 645; Indels 0; Gaps	CRC64;	The concession	Polyprotein:				rences on antiben	influences on antigen	*	Riberdy J.M.,											
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01-NOV-1996 (TrEMBLTel. C
01-DEC-2001 (TrEMBLTel. 1
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MEDLINE-95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger J.,
Shaw G., Kong L., Welss S., Waters D., Gallo R., Blatt
"Viral variability and serum antibody response in a la
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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                                                                                                                                            Reitz M., Hall I., Robert-Guroff M., Lautenberger J., Hahn Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner Wiral variability and serum antibody response in a laborat infected with HIV type I (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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Viruses; Retroid viruses; Retroviridae; Lentivirus
  EMBL;
                                                Mulder K.E.;
                                                                                                                                                                                                                                                                                                                                                                Viruses; Retroid viruses; NCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases. EMBL; U12034; AA,76669.1; -. IPR000328; Env GP41. InterPro; IPR000777; GP120.
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                                                                       STRAIN-LW881;
                                                                                                                                                                                                                                                                       MEDLINE=95127297; PubMed=7826699;
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                                                                                                 SEQUENCE FROM
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PF00517; GP41; 1.
Coat protein; Glycoprotein; Polyprotein; Coat protein; 47
Coat protein; Glycoprotein; Polyprotein; Coat Protein; Grand Coat Protein; Polyprotein; Protein; 
ted (JUL-1994) to the U12032; AAA76668.1; -.
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Envelope glycoprotein (
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Q70604;
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 748
NON_TER 748
AA; 84224 MW; 56BEDF186C67694B CRC64;
Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviric
NCBI_TaxID=11676;
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Pfam; PF00517; GP41; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shaw G., Kong L., Weiss S., Waters D., Gallo R., I "Viral variability and serum antibody response in infected with HIV type I (HTIV type IIP).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Viruses; Retroid viruses; NCBI_TaxID=11676;
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InterPro; IPR000777; GP120.
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97.2%;
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01,
                          Retroviridae;
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No. 5.6e-15;
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.;
"Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q70608
Q70608;
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                                                                                      AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.

NON_TER 752 752

SEQUENCE 752 AA; 84780 MW; 708672A2D0C0E8F8 CRC64;
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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                                                                                                                                                                                Submitted (JUL-1994) to the EMBL/GenBank/DDBJ EMBL; U12035; AAA76670.1; -
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InterPro; IPR000777; GP120.
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YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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35; Conser
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                                         Conservative
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01, Last sequence up
19, Last annotation
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Pred. No. 5.7e-15;
1; Mismatches 0;
                                                  Score 192;
Pred. No. 5.
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Q89797;
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Q78243;
MEDLINE=95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M.,
Shaw G., Kong L., Weiss S., Waters D
"Viral variability and serum antibod
                                                STRAIN-LW90-2;
                                                                              Viruses; Retroid
NCBI_TaxID=11676;
                                                                                           Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
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Borsetti A., Saggio I., Verar
"Variability of HIV-1 virus:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Biological and molecular characterization of producer a producer clones from HUT-78 infected with a patient HIV AIDS Res. Hum. Retroviruses 5:385-396(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Federico M., Titti F., Butto S., Orecchia A.,
Macchi B., Mangiano N., Verani P., Rossi G.;
"Biological and molecular characterization of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Verani P., Rossi G.B.;
"Sequence analysis of HIV-1 proviral DNA from chronically infected HUT-78 cellular clone.";
J. Viral Diseases 1:40-55(1992).
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NCE 851 AA;
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35; Conserv
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F., Federic
                                                                                                                             glycoprotein
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\., Saggio I., Verani P., Rossi G.;
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01-NOV-1996
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SEQUENCE FROM N.A.
MEDLINE-86281827; PubMed-3016298;
Gendelman H.E., Koenig
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Envelope [
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                                                                                                                                                                                                                         SEQUENCE FROM N.A.
Buckler C.E., Buckler
Submitted (JUL-1989)
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                                                                                                                                                                                                                                                                 "Production of acquired immretrovirus in human and non molecular clone.";
J. Virol. 59:284-291(1986).
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                              SEQUENCE
                                                                                                                                           MEDLINE-92219406; Pub
Dai L.C., Littaua R.,
                                                                                                                                                                                                                                                                                                                                                           Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                       Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
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                                                                      InterPro;
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                                                                                          EMBL; M19921; AAA44992
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PF00517; GP41; 1.
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R., Takahashi K.,
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virus type 1 at amino acid 585
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InterPro; 1FN0007;;
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Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
Pfam; PF00517; GP41; 1.

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01-NOV-1998 (TrEMBLrel. 0
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01-NOV-1996 (TrEMBLrel. C
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                                                        Viruses; Retroid
NCBI_TaxID=57667;
                                                                          Simian-Human immunodeficiency virus.
Simian-Human immunodeficiency virus.
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J. Virol. 59:284-291(1986).
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SEQUENCE FROM N.A. MEDLINE=99098984;
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man H.E., Koenig
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  PubMed=9882298
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97.2%;
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es; Retroviridae; Lentivirus
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InterPro; IPR000777; GP120.
Pfam; PF005516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprote
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Halloran M., Axthelm M.W., Letvin N.L., Sodroski J.G.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF041850; AAD12142.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Changes in human immunodeficiency virus type 1 envelope responsible for the pathogenicity of a multiply passaged immunodeficiency virus (SHIV-HXBc2).";
J. virol. 73:976-984(1999).
                                                                                                                                            Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases EMBL; D86068; BAA12995.1; -
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                           (HIV-1) Isolates.";
Virology 174:103-116(1990).
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"Spectrum of Biological Properties
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firuses; Retroid viruses; Retroviridae;
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; PF00517; GP41; 1.
; Coat protein; Glyco
ENCE 856 AA; 9728
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 673
                                                           Similarity
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T., Halloran M., Fanton J.W., Axthelm M.K., Letvin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein; Glycoprotein;
856 AA; 97151 MW; C50
                                                                                                                                                                                                                                                                                                                                                                                                    TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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                                                                                               Glycoprotein; Polyprotein; Transme 97287 MW; 238042A234C56685 CRC64;
                                                          97.5%;
97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                    Created)
Last sequence up
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                                                           Score 192;
Pred. No. 6.
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                                                Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     856
                                                                                                                                                                                                                                                                                                                                                       Lentivirus
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.5e-15;
                                                           DB 15;
.5e-15;
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                                                                                                                                                                                                                                                                   Immunodeficiency Virus
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                                                                                                       Transmembrane
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                                                                    Length
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                                                                      856;
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simian-human
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RESULT Q74090

QΥ

YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

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RESULT 14
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Best Local S
Matches 35
        Matches
                                            Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q9YXQ8
Q9YXQ8;
01-MAY-1999
01-MAY-1999
01-DEC-2001
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01-NOV-1996
01-DEC-2001
                                                                                                                                                                                              NON_TER
                                                                                                                                                                                                                                                                                                                                                    "HIV-1 subtypes among blood Submitted (NOV-1997) to the EMBL; AF034045; AAC79297.1; Interpro; IPR000328; Env_GP
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"Spectrum of Biological Properties
(HIV-1) Isolates.";
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Q74090
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NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENV
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                                                                                                                                                                                                                                                                                                               Pfam; PF00517; GP41;
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Costa L.J., Telles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-RJ96BRP029;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type 1
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                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                               Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rayfield M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=90101366; PubMed=1688473;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Iwatani Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Virology 174:103-116(1990).
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        34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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856 AA;
                                                                                                                                                             122
122 /
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TrEMBLrel. 10, or (TrEMBLrel. 10, or (TrEMBLrel. 19, or (TremBLrel. 1
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        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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                                                                                                                                                             AA;
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97396 MW; FE3E784C423C108C CRC64;
                                                                                                                                                             14767 MW;
                                        95.4%;
94.4%;
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97.2%;
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to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                    Env_GP41.
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Brindeiro R.,
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Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Retroviridae;
Score 188; DB Pred. No. 2.7e 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Last sequence update)
Last annotation update)
odominant region (Fragment).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Last sequence up
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                                                                                                                                                             B0B60F44F72975CB
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No. 6.5e-15;
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                                    DB 15;
?.7e-15;
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                                                                                                                                                             CRC64;
                                                                                Length 122;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Savedra A.,
, Pieniazek D.,
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RESULT 15

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PRELIMINARY; PRT; 684 AA.

AC Q9IK06;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-DCC-2001 (TrEMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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Search completed: May 16, 2003, 11:19:47 Job time: 26.3124 secs
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Best Local Similarity 94.4
Matches 34; Conservative
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EMBL; AF217161; AAF75503.1; -.

InterPro; IPR000328; Env_GP41.

InterPro; IRR000777; GP120.

Pfam; PF00516; GP120; 1.

Pfam; PF00517; GP41; 1.

AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.

SEQUENCE 684 AA; 77266 MW; F9E6F3CCE4D32E10 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-546HC-B6; Gartner S., Liu Y., Tang X.P., McArthur J.C., Scott J.; Gartner S., Liu Y., Tang X.P., McArthur J.C., Scott J.; Analysis of human immunodeficiency virus type 1 gp160 sequences from a patient with HIV dementia: evidence for monocyte trafficking into brain.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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-i- MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND WMJ3 WERE OBT ELOOD SAMPLES SEQUENTIALLY TAKEN FROM A TWO-YEAR OLD WAS PERINATALLY INFECTED BY HER MOTHER.
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                                    89.8%;
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01-OCT-1989 (Rel. 12, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)1
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"Nucleotide sequences of gag and env
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PIR; AO3976; VCLJA2.
HIV; KO2007; ENVSSF2.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotein
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: E
glycoprotein (GP120); Transmembrane glycoprotein
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MEDILINE-85090453; PubMed-2578227;

Sanchez-Pescador R., Power M.D., Barr P.

Stempien M.M., Brown-Shimer S.L., Gee W.

Stempien M.M., Dina D., Luciw P.A.;

Levy J.A., Dina D., Luciw P.A.;
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Viruses; Retroid viruses;
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                                     protein; Polyprotein;
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01-NOV-1998 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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01-NOV-1988
15-JUL-1999
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MEDILIND=86235450; PubMed=3012778;

Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R., Markham P.D.

Salahhddin S.Z., Wong-Staal F., Gallo R.C., Parks E.S., Parks

"Genetic variation in HTLV-III/LAV over time in patients with
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es; Retroviridae; Lentivirus.
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01-JUL-1993 (Rel.
15-JUL-1999 (Rel.
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SEDILINE-86218077; PubMed=2423250;

Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D.,

Parks E.S., Parks W.P., Josephs S.F., Gallo R.C.,

"Identification and characterization of conserved

"Identification and characterization of conserved
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es; Retroid virus
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polyprotein GP160 precursor [Contains: Exterior membrane
tein (GP120); Transmembrane glycoprotein (GP41)].
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MEDLINE-90347835; PubMed-2384920;
MEDLINE-90347835; PubMed-2384920;
Cheng-Mayer C., Ouiroga M., Tung J.W., Dina D., Levy
"Viral determinants of human immunodeficiency virus
"Viral determinants of human immunodeficiency virus
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glycoprotein (GP120);
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15-JUL-1999 (Rel.
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InterPro; IPR000777; GP120.
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                                                                                                                                                                                             Viruses; Retroid
NCBI_TaxID=11700;
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21-JUL-1986 (Rel. 01, Last sequence
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Envelope polyprotein GP160 precursor
glycoprotein (GP120); Transmembrane
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                 InterPro;
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3L; K02083; AAB59873.1; -
3L; X01762; CAA25903.1; ALT_SI
8; AO3974; VCLJVL.
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Q70626;
15-JUL-1998 (Rel. 36, C
15-JUL-1999 (Rel. 36, I
15-JUL-1999 (Rel. 38, I
15-JUL-1999 (Rel. 38, I
Envelope polyprotein G
glycoprotein (GP120); T
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AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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NCBI_TaxID=82834;
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Viruses; Retroid virus
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                                    SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - EUROpean Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way fied and this statement is not removed. Usage by and for commercial ties requires a license agreement (See http://www.isb-sib.ch/announce/end an email to license@isb-sib.ch).
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35; Conservative
155; AAA76690.1; -.
1DB; Q70626; -.
1PR000328; Env_GP4:
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97.2%;
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GP160 precursor [Contains: Exterior membrane; Transmembrane glycoprotein (GP41)].
 Env_GP41
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                                                                                                                                                                                                                      virus type 1 (LW12.3 isolate) (HIV-1).
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Pfam; PF00516; GP120;
Pfam; PF00517; GP41;
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GP160 precursor [Contains:
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15-UUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Eglycoprotein (GP120); Transmembrane glycoprotein
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Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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EMBL; AF038399; AAB99976.1;
EMBL; AF033819; AAC82596.1;
HIV; K03455; ENV$HXB2.
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NCBI_TaxID=11706;
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MEDLINE=85228248; PubMed=2988795;

Crowl R., Ganguly K., Gordon M., Conroy R.,

Shaw G.M., Wong-Staal F., Reddy E.P.;

"HTLV-III env gene products synthesized in lantibodies present in the sera of AIDS patiantibodies 14:979-986(1985).
                                                                                                                                                                                                                                                                                                                                                                                       13-AUG-1987 (Rel. 05, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
glycoprotein (GP120); Transmembrane glycoprotein
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NCBI_TaxID=11707;
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"Assignment of intrachain disulfide bonds and potential glycosylation sites of the type 1 re immunodeficiency virus envelope glycoprotein (Chinese hamster ovary cells.;
J. Biol. Chem. 265:10373-10382(1990).
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Ratner L., Haseltine W., Patarca R., Livak K.J., Starcich Josephs S.F., Doran E.R., Rafalski J.A., Whitehorn E.A., Baumeister K., Ivanoff L., Petteway S.R. Jr., Pearson M.L. Lautenberger J.A., Papas T.S., Ghrayeb J., Chang N.T., Gal
                                                                                          MEDLINE=90285159;
Leonard C.K., Spe.
Gregory T.J.;
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l Similarity 97.2%;
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Pfam; PF00517; GP41; 1
AIDS; Coat protein; Pc
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PIR; A03973; VCLJH3.
HIV; M15654; ENV$BH102.
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InterPro; IPR000777; GP120.
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  GenCore version 5.1.4_p5_4578 (c) 1993 - 2003 Compugen Ltd.
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506 506 851 74	ween the Swiss Institute of Bioinformaticum Institute. The by non-profit institutions as long fied and this statement is not remove ties requires a license agreement (Seend an email to license@isb-sib.ch). K02011; ANA44661.1; K02011; ANA44661.1; K02011; ENVSH82; COSUITEDB; P04582; COSUITEDB; P04582; SPF00516; GP120; 1. PF00517; GP120; 1. PF00517; GP41; 1. PF00517; GP41; 1.	axID=11684; CCE FROM N.A. EE=851111.33; PubMed=2578615; L., Haseltine W., Patarca R., Liv. s. S.F., Doran E.R., Rafalski J.A., ster K., Ivanoff L., Petteway S.R. berger J.A., Papas T.S., Ghrayeb J taal F.; ete nucleotide sequence of the AID: 313:277-284(1985).	
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OM protein - protein search, using sw model

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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DP-178 derived fro DP178 corresponds HIV-1 derived pept SEQ ID NO. 108 fro SEQ ID NO. 1 from Synthetic peptide HIV-1 LAI gp41 T-2 T20/DP178 peptide T20/DP178 peptide T20/DP178 peptide
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RESULT 1 AAR64364 ID AAR6 XXXXXXX 07-JUN-1993; human immunodeficiency virus; transmembrane protein; gp41; alpha helix; leucine zipper; DP-185. DP-178 derived from HIV-1 isolate LAI has antiviral activity. 07-JUN-1994; Synthetic 24-AUG-1995 (first entry) AAR64364; AAR64364 standard; Peptide; 36 AA 22-DEC-1994. WO9428920-A Modified-site Modified-site antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI; 93US-0073028 94WO-US05739 38 /note= Location/Qualifiers /note= "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier gp. attached" $\,$ "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic macromolecular carrier gp. attached

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RESULT 2
AAR98398
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Computer search generated synthetic HIV transmission
                                                                                                                                                                                                                                                                                                                     Antifusogenic activity; antiviral capability; coiled-coil peptide; ALLMOTI5; 107x178x4; PLZIP search motif; viral transmission; HIV; influenza virus; hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                    DP178 corresponds to residues 638-673 of HIV-1(LAI) gp41
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Petteway SR,
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                                   Inhibiting viral transmission, isolated peptide recognised by sequence search motif
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                                                                                                                                                                                                                                                                                             Human immunodeficiency virus type 1.
            Disclosure;
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20-DEC-1994;
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                                                                                                                                                (UYDU-) UNIV DUKE.
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35; Conserv
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97.2%;
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Pred. No. 1.3e-16;
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                                                 e.g. HIV or RSV, to a of an ALLMOTI5, 107x178x4
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YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The sequences given in AAR98398-408 represent peptides which exhib antifusogenic activity, antiviral capability and/or the ability to modulate intracellular processes involving coiled-coil peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          structures. These peptides are recognised by the ALLMOTIS, 107x178x4 and PLZIP search motifs. These peptides may be used to inhibit the transmission of a virus, pref. HIV, influenza virus, or hepatitis B virus, to a cell.
                                                                                                                                                                                                                                                                            Compsns. contg. DP-178 or DP-107 in combination with other therapeutic agent – useful for treatment of HIV infection, inhibiting replication or transmission of HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV-1 derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW17011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW17011 standard;
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                                                                                         reverse transcriptase, viral protease, cytokine, glycosylation or viral mRNA processing inhibitor or a nucleoside inhibitor. The peptides work by inhibiting viral replication or inhibiting transmission. They may also be used in vaccines for protecting against HIV infection.
                                                                                                                                                           from HIV type 1 glycoprotein 41 (gp41) transmembrane protein. The peptide corresponds to residues 638-673 of gp41. DP-178 and its derivatives are used in combination with a therapeutic agent, e.g.
                                                                                                                                                                                                                                            Claim 2; Figure 1; 84pp; English.
                                                                                                                                                                                                                                                                                                                                             WPI; 1997-099886/09
                                                                                                                                                                                                                                                                                                                                                                                                                                          07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9640191-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1 LAI isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     replication;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transmembrane;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV; SIV: human;
                                                                                                                                                                                                                                                                                                                                                                             Johnson RM,
                                                                                                                                                                                                                                                                                                                                                                                                          (TRIM-) TRIMERIS INC
                                                              Sequence
                                                                                                                                                                                                                AAW17011
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
35; Conserv
               Similarity
                                                                                                                                                                                                            represents a peptide designated DP-178, a peptide derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36 AA;
                                                                36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
Conservative
                                                                                                                                                                                                                                                                                                                                                                             Lambert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transmission.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    n; simian immunodeficiency virus; glycoprotein 41; antiviral; DP-178; DP-107; vaccine; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                        95US-0481957.
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97.2%;
             97.5%;
97.2%;
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Pred. No. 1.3e-16;
               Score 192; DB 18;
Pred. No. 1.3e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for treatment
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                                                                                                                                               glycosylation or viral
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RESULT 4
AAX22912
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                                                                                                                                                                                                                                                                                                                                CC (HIV). Specifically, ANY22810, ANY22810, ANY22871, ANY22880, ANY22888 and CC ANY22903 represent consensus sequences of various sections of the gp41 CC protein). Sequences derived from the peptides are used to produce peptide is produced by synthesising an octapeptide in which both terminal peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide constrained helical peptide by reacting the specified side-chain cresidues with a difunctional linker to produce two amide bonds. CC The constrained helical peptides are used to treat or prevent HIV cc infection, especially as vaccines that generate antibodies that cc constrained helical peptides are used to treat or prevent HIV cc infection, especially as vaccines that generate antibodies that cc constrained helical peptides are used to treat or prevent HIV cc infection. The antibodies are also useful for diagnosing HIV infection. Other cc uses for the constrained helical peptides are in affinity purification co of ligands (particularly where complete binding protein is not readily cavailable, e.g. replacements for protein A in immunoglobulin cc forms of "floody" bestides or broteins.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 233-234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-JUN-1997;
06-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO.
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                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-286866/25
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                                                                                                                                                              Local
1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                             of.
                                                                                                                                1 Similarity
35; Conserv
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96US-0743698.
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                                                                                                                                                                                                                                                                                                                         peptides or proteins.
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                                                                                                                            Score 192; DB 19;
Pred. No. 1.3e-16;
1; Mismatches 0;
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Query Match Matches

Local Similarity hes 35; Conser

Conservative

97.5%; 97.2%;

Score 192; DB 19; Pred. No. 1.3e-16;

DB 19; 0

36

Mismatches

Indels

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Gaps

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RESULT 5
AAY22805
ID AAY2
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XX
infection, especially as vaccines that generate antibodies that prevent viral membrane fusion or infectivity. Vaccines may contain constrained helical peptides derived from several different strains of HIV. The antibodies are also useful for diagnosing HIV infection. Other uses for the constrained helical peptides are in affinity purification of ligands (particularly where complete binding protein is not readily available, e.g. replacements for protein A in immunoglobulin purification); as epitope mimics for antibody production; for isolation of synthetic antibody clones from phage display libraries, or as stable forms of "floppy" peptides or proteins.
                                                                                                                                                                                                                        (HIV). Specifically, AAY22810-Y22910 are derived from gp41 proteins of known HIV virus strains (AAY22810, AAY22871, AAY22880, AAY22888 and AAY22903 represent consensus sequences of various sections of the gp41 protein). Sequences derived from the peptides are used to produce constrained helical peptides of the invention. The constrained helical peptide is produced by synthesising an octapeptide in which both terminal amino acids have a side-chain that includes a group able to form an amide bond, and cyclising the octapeptide by reacting the specified side-chain residues with a difunctional linker to produce two amide bonds.

The constrained helical peptides are used to treat or prevent HIV
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  virus gp41 protein, useful in vaccines of infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-286866/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 143-144; 279pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Production of constrained helical peptide(s) by linking side chains on termini of octa:peptide - derived from human immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-JUN-1997;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HIV; gp41 protein; constrained helical peptide; HIV infection; vaccine; antibody; viral membrane fusion; viral infectivity; ligand affinity purification; protein A replacement; immunoglobulin purification; epitope mimic.
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                                                                                                                                                                                                                                                                                                                                                                                                                      Peptides AAY22805-Y22917 are derived from Human immunodeficiency virus
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ĀΑ;
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RESULT 7
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                                                                                                                                                                                                                                                                    The present sequence represents an N- and C-terminal modified peptide, designated T-20 (or DP-178), corresponding to amino acids CG 58-673 of the transmembrane protein gp41 of HTV-1 LAI isolate. CG The invention relates to methods for the synthesis of peptides, CG The invention relates to methods for the synthesis of peptides, CG in particular T-20 and T-20-like peptides. The method involves synthesizing specific side-chain protected peptide fragment intermediates of T-20 or a T-20-like peptide on a solid support, coupling the protected fragments in solution to form a protected T-20 or T20-like peptide. The invention colling to the side that T-20 or T-20-like peptide. The invention colling to the synthesis of peptides of interest (e.g. act as intermediates in the synthesis of peptide fragments which act as intermediates in the synthesis of the peptide fragments. The invention colling the particular groups of peptide fragments which act as intermediates in the synthesis of the peptide fragments. The interest (The interest to individual peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates in the synthesis of the peptide fragments which act as intermediates or the large scale, economical production of high
                                                                                                                                            Query Match
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Matches 35
                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                        purity peptides.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    methods of peptide synthesis, particularly used to produce T-20 or
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01-MAY-1998;
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic peptide T-20
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                                                                                                                                              Local Similarity
les 35; Conserv
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                                                                                                        YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                        YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                Conservative
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98US-0071877.
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                                                                                                                                            Score 192; DB 20;
Pred. No. 1.3e-16;
1; Mismatches 0;
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RESULT 8
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Matches 35;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a peptide, designated T-20 (or pp-178), that corresponds to amino acids 638-673 of the transmembrane protein gp41 of HIV-1 LAI isolate. The invention relates to methods for the synthesis of peptides, in particular C- and N-terminal modified T-20 (see AAY31955) and T-20-like peptides. The method involves synthesizing specific side chain protected
Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response chemoattractant.
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01-MAY-1998;
                                                                 T20/DP178 peptide
                                                                                                                                   AAB52655;
                                                                                                                                                                     AAB52655 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                    23-FEB-2001
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35; Conserv
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98US-0071877
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                                                                  fragment #33
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97.2%;
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                                                                                                                                                                                                                                                                                                                                          Score 192; DB 20;
Pred. No. 1.3e-16;
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the large scale,
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               response up-regulation;
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inal T-20
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RESULT 9
AAB52688
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Best Local :
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                                                                                                                                                                The present sequence is a peptide fragment of T20/DP178. T20/DP178 is a helical segment of the ectodomain of HIV-1 protein gp41. T20/DP178 is located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an inflammatory response in a subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wang
                   Wang
WPI; 2000-656493/63
                                                              05-MAY-1999;
                                                                                    05-MAY-2000;
                                                                                                         09-NOV-2000
                                                                                                                              WO200066622-A1
                                                                                                                                                 Human immunodeficiency virus type
                                                                                                                                                                                                                T20/DP178 peptide fragment #66.
                                                                                                                                                                                                                                       23-FEB-2001
                                                                                                                                                                                                                                                             AAB52688;
                                                                                                                                                                                                                                                                               AAB52688 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                    JM,
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35; Conser
                                        US DEPT HEALTH & HUMAN
                  Oppenheim JJ,
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97.2%;
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Pred. No. 1.3e
1; Mismatches
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                  Gong W,
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                                                                                                                                                                                inflammatory response up-regulation;
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l.3e-16;
les 0;
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                   Gao J,
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                   Murphy
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RESULT 10
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Matches 35
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                          The present sequence is a peptide fragment of T20/Dp178 T20/Dp178 in helical segment of the ectodomain of HTV-1 protein gp41 T20/Dp178 in located in the carboxyl terminus of the gp41 ectodomain gp41 plays critical role in the fusion of HTV-1 and host cell membranes T20/Dp1 interacts with members of the formyl peptide receptor (FPR) family a thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes
                                                                                                                                                                      Administration of peptide agents with a sequence correstial-length T20/DP178 or T21/DP107 formyl peptide antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                chemoattractant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antiinflammatory; T20/DE formyl peptide receptor
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                                                                                                                                           Claim 14; Page 40; 148pp;
                                                                                                                                                                                                                                WPI; 2000-656493/63.
                                                                                                                                                                                                                                                          Wang JM,
                                                                                                                                                                                                                                                                                                                    05-MAY-1999;
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35; Conser
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tory response
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97.2%;
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                                                                                                                                            English
sent peptide
subject.
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1; Mismatches
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                                                                                                                                                                                                                                                          Gao J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .3e-16;
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              used
                                                                                                                                                                                                    corresponding
                                                                                                                                                                                                                                                          Murphy
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                 to modulate
                                                                                                                                                                                      receptor
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                                                                      T20/DP178
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RESULT 11
AAB14533
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                       domain (the transmembrane-proximal amphipathic alpha-helical segment), or the 9p41 core 6-helix bundle, which is formed by the interaction of the N- and C-helical domains of three 9p41 proteins. The peptides can be administered either singly or as a combination (particularly a combination of N-helical and C-helical peptides), and can be multimerised. For example, N- and C-helical domain peptides can be alternately linked together to form a peptide which mimics the core 6-helix bundle. Administration of the peptide(s) generates a humoral response, with the production of antibodies against 9p41 structures involved in viral entry. As these portions of 9p41 are well
                                                                                                                                                                                               Sequences AAB14532-B14534 and AAB14569-B14602 represent specifically claimed peptides derived from the C-helical domain of the gp41 envelope glycoprotein from a variety of HIV-1 isolates. The invention relates to raising a neutralising antibody response to a broad spectrum of HIV (human immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or mimics highly conserved portions of gp41 which are important in mediating the process of viral entry into host cells. Such peptides can correspond to or mimic the coiled coil solution structure of the N-helical domain (the heptad repeat region), or can correspond or mimic the C-helical
                                                                                                                                                                                                                                                                                                                                                                                                                            Raising neutralizing antibody response to human immunodeficiency virus, comprises administering a polypeptide capable of forming a stable coiled-coil solution structure -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gp41 transmembrane-proximal amphipathic alpha-helico
core 6-helix bundle; viral entry inhibition; immunoo
antibody; humoral response; broad spectrum vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-JAN-1999; 99US-0115404
07-JAN-2000; 2000US-0480336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-1 isolate LAI gp41 C-helical domain residues 643-678 (peptide P-18).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB14533 standard; peptide; 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (WILD/) WILD C T. (WEIS/) WEISS C D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-JAN-2000; 2000WO-US00456
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 envelope glycoprotein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gp41 C-helical domain;
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35; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                              Page 12;
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in viral entry. As .....
in varal entry. As ....
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97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prophylaxis; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amphipathic alpha-helical segment;
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Pred. No. 1.3e-16;
1; Mismatches (
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RESULT 1:
AAY88665
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                                           The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (9941) protein sequences. Sequence linked to core polypeptides. The enhancer polypeptides are polypeptides are the polypeptide that they are linked to. The enhancer peptides enhance the polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bloactive peptides selected from a growth factor, cytokine, differentiation factor, interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for anti-fusogenic treatments. Sequences ANR8651-79055 represent core anti-fusogenic treatments. Sequences ANR8651-79055 represent core
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              as a prophylactic or therapeutic vaccine to generate antibodies which reduce or inhibit the ability of HIV to infect uninfected cells. A composition comprising polycional or monoifent antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against entry-relevant gp41 structures may also be used therapeutically and as tools to further elucidate the mechanism of HIV
                                                                                                                                                                                                                                                                                                              Disclosure; Page 21; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   colony stimulating factor;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY88665 standard; peptide;
                                polypeptide fragments that can be used in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TRIM-) TRIMERIS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
              those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                                   hybrid polypeptide with enhanced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        l Similarity
35; Conserv
                                                                                                                                                                                                                                                                                                                                                  enhancer sequence
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97.2%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                   pharmacokinetic properties
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L.3e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Lambert
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                                Some sequences
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RESULT 13
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                                                                                                                                        The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the polypeptide that they are linked to. The core polypeptides are any core polypeptide that may be introduced into a living system and that can core polypeptide for the treatment or polypeptides as a pharmacoligically useful peptide for the treatment or core polypeptides are bioactive peptides can core polypeptides are bioactive peptides can core core polypeptides are bioactive peptides can end that can be used in interferon, colony stimulating factor, hormone or considered elastic peptides of the invention can be used for consistent treatments. Sequences AAV88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences can be used in the invention. Some sequences can be used in the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; angiogenic factor.
                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 22; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              A new hybrid polypeptide with enhanced pharmacokinetic properties comprises enhancer sequence -
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                                                Local
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1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                   35;
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35; Conserv
                                                Similarity
                                                                                                                              hybrid polypeptides.
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                                                                                               36 AA;
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                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence
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97.2%;
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                              Score 192; DB 21;
Pred. No. 1.3e-16;
1; Mismatches 0,
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Pred. No. 1.3e-16;
1; Mismatches 0;
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                                                            Length 36;
                               Indels
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RESULT 15 AAY89136

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AAY89136 standard;

peptide;

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1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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RESULT 14
AAY89135
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                     Query Match
Best Local
  Matches
                                                                                                       among among
                                                                                                                                        interleukin, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and anti-fusquenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                 pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor,
                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1 HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY89135 standard;
                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             comprises enhancer sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A new hybrid polypeptide with enhanced pharmacokinetic properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-136792/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        colony stimulating factor; hormone; angiogenic factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Core polypeptide fragment T No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 Similarity
35; Conser
                                                                                                                         hybrid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Guthrie KI,
                                                                                  36
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                    ΑĀ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0082279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US11219
                                                                                                                      polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide;
                   97.5%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Merutka G,
                   Score 192; DB 21; Pred. No. 1.3e-16;
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  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anwer MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lambert DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    envelope protein; HIV-1;
                                      Length 36;
  Indels
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Search completed: May 16, 2003, 11:12:04 Job time: 32.4578 secs
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                                                                                                                                    Query Match
Best Local Similarity 97.2
                                                                                                                                                                                                                                                                                                                                         The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bioactive peptides selected from a growth factor, cytokine, differentiation factor, interfeuon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anni-viral and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; anglogenic factor.
                                                                                                                                                                                                                                                                                 anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-136792/12.
                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                 and form hybrid polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 30; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Barney S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9959615-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  comprises enhancer sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A new hybrid polypeptide with enhanced pharmacokinetic properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TRIM-) TRIMERIS INC.
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                                                                       1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                36 AA;
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                                                                                                                                                  Score 192; DB 21;
Pred. No. 1.3e-16;
1; Mismatches 0;
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                                                                                                                                                                                      Length 36;
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APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TILE OF INVENTION: BEING IMMOBILIZED
FILE REFERENCE: ALBRE-22
CURRENT APPLICATION NUMBER: US/10/059,271
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 82
LENGTH: 254
TYPE: PRI
ORGANISM: Artificial Sequence
FEATURE:
OTHER TIMESTALD
                                                                                                                               Query Match
Best Local Similarity
Thes 35; Conserva
Search completed: May 16, 2003, 12:10:24 Job time : 15.759 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-059-271-82
                                                                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide US-10-059-271-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 81
LENGTH: 232
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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Publication No. US20030082208A1
GENERAL INFORMATION:
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Best Local Similarity 97.3
Atches 35; Conservative
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PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEO ID NOS: 97
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                                                                     Conservative
                                                                                                                                                                   97.0%;
97.2%;
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97.2%;
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Pred. No. 7.2e-16;
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Pred. No. 6.5e-16;
0; Mismatches 1
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                                                                                                                                                                                   Length 254;
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                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT;
; ORGANISM: Human immunodeficiency virus type 1
US-09-779-451-4
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US-09-779-451-41
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                                                                                  US-10-040-349B-2
                                                                                                     RESULT 12
                                   Sequence 2, Application US/10040349B Publication No. US20030082521A1
  GENERAL INFORMATION: APPLICANT: Brasseur
                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 4
LENGTH: 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/09779451 Patent No. US20020094521A1
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                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Allaway, Graham P. TITLE OF INVENTION: Assay for FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
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TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn version 3.0 PQ ID NO 41 LENGTH: 46
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                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 77 SOFTWARE: PatentIn version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
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PRIOR APPLICATION NUMBER: US 60/181,543
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                                                                                                                                                                16 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 97.:
es 35; Conservative
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97.2%;
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97.2%;
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Pred. No. 1.5e-16;
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Pred. No. 1
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1.2e-16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 97
SOFTWARE: PATENTIN Ver. 2
SEQ ID NO 84
LENGTH: 221
TYPE: PRT
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                                                                                                                                         US-10-059-271-81
                                                                                                                                                              RESULT 14
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Best Local Similarity 97.2
                                                                                                 Sequence 81, Application US/10059271 Publication No. US20030082208A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 84, Application US/10059271 Publication No. US20030082208A1 GENERAL INFORMATION:
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LENGTH: 177
                                                                              GENERAL INFORMATION:
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Best Local Similarity 97.3
Matches 35; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
TITLE OF INVENTION: BEING IMMOBILIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Krell, Tino TITLE OF INVENTION: Polypeptide Inducing Antibodies Neutralizing FILE REFERENCE: 01-078-A
                                   APPLICANT: REPKE, HEINRICH APPLICANT: BUDDE, ECKHARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: DE 101 06 295 PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
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                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: ALBRE-22
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 177
TYPE: PRT
ORGANISM: Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Peptide
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                                                                                                                                                                                                                         131 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 166
                                                                                                                                                                                                                                                                 1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                     NICOLAUS,
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Pred. No. 6.2e-16;
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Pred. No. 4.9e-16;
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                                                                                                                                                                                                                                                                                         1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: (Unknown)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
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TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
                                                                                                                                                APPLICANT: Andrew C. Braisted
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SEQUENCE DESCRIPTION: SEQ ID NO: 1:
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MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
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ADDRESSEE: Genente
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: California
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                                                                      J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
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Melissa A. Starovasnik
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Robert S. McDowell
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Pred. No. 9.2e-17;
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APPLICANT: Lechner, Franziska
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0180002
CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 176
LENGTH: 37
TYPE: PRI
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Best Local Similarity
Thas 35; Conserve
                                                                            US-09-848-616-176
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                  Query Match
Best Local Similarity
    Matches
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                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Sebbel, Peter APPLICANT: Dunant, Nico
                                                                                                              ORGANISM: Artificial Sequence FEATURE:
                                                                                            OTHER INFORMATION: DP178c peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 650/225-8674
TELEFAX: 650/952-9981
INFORMATION FOR SEQ ID NO: 108:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION - CURROWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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NAME: TOTChia, PhD., Timothy E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P1005R2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech,
STREET: 1 DNA Way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE DESCRIPTION: SEQ ID NO: 108:
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TOPOLOGY: Linear
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Tissot, Alain
                                                                                                                                                                                                                                                                                                                                                                                        Dunant, Nicolas
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o. US20030054010A1
Conservative
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                  97.0%;
97.2%;
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97.2%;
                  Score 191; DB 9; Pred. No. 9.4e-17;
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Pred. No. 9.2e-17;
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Mismatches
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                                  Length 37;
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1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

SOFTWARE: PatentIn SEQ ID NO 1

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NUMBER OF SEQ ID NOS: 5

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                                                  ; NAME/KEY: PEPTIDE
; LOCATION: (1)..(36)
; OTHER INFORMATION: T-20
US-09-796-202-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide US-09-493-346-1
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Best Local :
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SEQ ID NO 10
LENGTH: 36
TYPE: PRT
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                         Sequence 10, Application US/09796202
Patent No. US20020068813A1
                                                                                                                                                                                                                                           APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/493,346 CURRENT FILING DATE: 2000-01-28
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SOFTWARE: PatentIn Ver. 2.0
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APPLICANT: Maddon, Paul J
TITLE OF INVENTION: Compositions and Methods
TITLE OF INVENTION: Infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           equence 1, Application US/09493346
blication No. US20030082185A1
ENERAL INFORMATION:
                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 17
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TYPE: PRT
ORGANISM: Artificial Sequence
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TYPE: PRT
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9-796-202-10
                                                                                                                                       ORGANISM: unknown
                                                                                                                          FEATURE:
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Pred No. 9.2e-17;
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Pred: No. 9.2e-17
 Score 191;
Pred. No. 9
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 DB 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-779-451-5
                                                                                                                                             US-09-834-628-1
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Best Local Similarity
Matches 35; Conserv
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                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                          APPLICANT: YU, YEON GYU
APPLICANT: YIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
TITLE OF INVENTION: PEPTIDES FOR INHIBITION OF HIV INFECTION
FILE REFERENCE: 05823.0198-00000
CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
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Best Local
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                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILLING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 36
TYPE: PRT
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                                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide OTHER INFORMATION: DP178
                                                                                                                                                                                                                                                      LENGTH: 36
TYPE: PRT
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                                                                      Local Similarity
les 35; Conser
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97.2%;
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Maximum DB
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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    protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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                         97.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Published_Applications_AA:*
                                                                                                                                                                                                                                                                                                          GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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US-09-834-628-1

US-09-854-816-1

US-09-848-616-176

US-09-848-616-176

US-09-848-616-176

US-09-779-451-41

US-09-779-451-41

US-09-779-451-41

US-09-779-451-41

US-10-040-3498-2

US-10-059-271-81

US-10-059-271-81

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US-10-059-271-81

US-10-059-271-81

US-10-059-271-81
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Sequence 16, Appli
Sequence 1, Appli
Sequence 10, Appli
Sequence 10, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 176, Appli
Sequence 41, Appli
Sequence 41, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 84, Appli
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Sequence 87, Appli
Sequence 97, Appli
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Sequence 97, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 18, Appli
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US-09-854-816-16 US-09-854-816-17 US-09-854-816-18

344 9 US-10-040-345 9 US-10-026-345 9 US-10-026-345 9 US-10-026-35 9 US-10-059-756 853 9 US-10-059-756 861 9 US-10-059-756 865 9 US-10-003-6 1186 9 US-10-026-1186 9 US-10-026-1186 9 US-10-03-6 1186 10 US-09-854-268 10 US-09-854-268 10 US-09-854-269 10 US	RESULT 2 US-10-116-797-1 ; Sequence 1, Application US/1011 ; Publication No. US20030044411A1 ; Publication No. US20030044411A1 ; GENERAL INFORMATION: APPLICANT: Olsen, William C. ; APPLICANT: Maddon, Paul J. ; TITLE OF INVENTION: METHODS FO ; FILE REFERENCE: 64672-A ; CURRENT APPLICATION UMBER: US ; CURRENT FILING DATE: 2002-10-	Query Match Query Match Best Local Similarity 97.2%; Pred. No. 9. Matches 35; Conservative 0; Mismatche Qy 1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF	RESULT 1 US-09-874-475-16 US-09-874-475-16 Jequence 16, Application US/ Sequence 16, Application US/ Publication No. US2002018259 GENERAL INFORMATION: APPLICANT: Petropoulos, Chr APPLICANT: Petropoulos, Chr APPLICANT: Whitcomb, Jeane APPLICANT: Huang, Weil T. APPLICANT: Huang, Weil T. APPLICANT: Huang, Weil T. APPLICANT: HUENTION: AND IN TITLE OF INVENTION: AND IN TITLE OF INVENTION: AND IN TITLE REFERENCE: 2793/65166 CURRENT APPLICATION UNMER: CURRENT FILING DATE: 2001- NUMBER OF SEO ID NOS: 16 SOFTMARE: PATENTIN Version JERGTH: 36 TYPE: PRT ORGANISM: Fusion Inhibitor US-09-874-475-16	20 191 97.0 344 21 191 97.0 345 22 191 97.0 391 22 191 97.0 391 23 191 97.0 519 24 191 97.0 853 26 191 97.0 861 27 191 97.0 1186 30 188 95.4 268 31 188 95.4 268 33 188 95.4 268 34 185 93.9 1231 36 183 92.4 268 37 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 268 39 182 92.4 269 41 182 92.4 646 43 182 92.4 646
	5/10116797 1411A1 C. J. S. FOR INHIBITING DDS FOR INHIBITING DDS 12-10-15	7.0%; Score 7.2%; Pred. 7.2%; Pred. (NEQELLELDKW/	JS/09874475 ZS92A1 Christos J. T. Inette INHIBITORS AND INHIBITORS 0 ER: US/09/87. D1-06-04 On 3.1	
VALUATI USING Indel	INFECTION	ngth 36; Indels 0; Gaps 0;	EVALUATING VIRAL RECEPTOR/CO-RECE Y USING RECOMBINANT VIRUS ASSAYS	Sequence 1, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 1, Appli Sequence 1, Appli Sequence 103, Appli Sequence 55, Appli Sequence 55, Appli Sequence 1, Appli Sequence 1, Appli Sequence 41, Appli Sequence 41, Appli Sequence 94, Appli Sequence 94, Appli Sequence 13, Appli Sequence 13, Appli Sequence 26, Appli Sequence 27, Appli Sequence 37, Appli Sequence 38, Appli Sequence 39, Appli Sequence 39, Appli Sequence 39, Appli

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1 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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RESULT 15
US-09-082-279B-603
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 498
LENGTH: 36
TYPE: PRT
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Matches
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Best Local Similarity
Matches 35; Conserv
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
NO ID NO 497
LENGTH: 36
TYPE: PRT
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APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
ILE REFERENCE: 7872-043
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
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les 35; Conser
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                                                                                       1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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NT: Barney, Shawn
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                                                                     YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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Merutka, Gene
Anwer, Mohmed
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Merutka, Gene
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Pred. No. 9.3e-18;
                                                                                                                                        Score 191; DB 4;
Pred. No. 9.3e-18;
0; Mismatches 1
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CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 603
LENGTH: 36
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: OTHER INFORMATION: Core polypeptide
US-09-082-279B-603
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Search completed: May 16, Job time: 10.1928 secs
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                                                                                                                                    Query Match
Best Local Similarity
Matches 35; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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                                                                                  1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                   YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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Guthrie, Kelly
Merutka, Gene
Anwer, Mohmed
                                                                                                                                        Conservative
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                                                                                                                                                         97.0%;
97.2%;
                2003,
                  11:22:12
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Pred. No. 9.3e-18;
0; Mismatches 1
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US-08-554-616-1

Sequence 1, Application US/08554616
Patent No. 6133418
GENERAL INFORMATION:

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TITLE OF INVENTION: MITTLE OF INVENTION: MITTLE OF INVENTION: MITTLE OF SEQUENCES:
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                                                                                                                                                APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: COPUZZÍ, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 783
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/073,028
FILING DATE: 07-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                   APPLICANT:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wild, Carl T.
TITLE OF INVENTION: SYNTHETIC PER
TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acids
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OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
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TOPOLOGY: unl
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STATE: New York
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             Lambert, Dennis M.
Petteway, Stephen R.
Langlois, Alphonse J.
Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF
VENTION: MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING
VENTION: MEMBRANE FUSION-TAL VIRUS TRANSMISSION
EQUENCES: 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (212) 869-8864/9741
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                                                                                                                                 Barney, Shawn O.
                                                                                                                                                  Matthews, Thomas J. Wild, Carl T.
                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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06-NOV-1995
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97.2%;
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Pred. No. 9.3e-18;
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; OTHER INFORMATION: Core polypeptide US-09-082-279B-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-082-279B-15
                                                                                                                                                  SOFTWARE: F
SEQ ID NO 15
LENGTH: 36
                               Query Match
   Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
                                                                                                                                                                                                  FILE REFERENCE: 7872-043
CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                                                                                                                                                                                                                                   TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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                                                                                                                 ORGANISM: Artificial Sequence
                                                                                                                                    TYPE: PRT
                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,264A
FILING DATE: 07-UN-1995
FILING DATE: 07-UN-1995
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REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
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NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,
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MEDIUM TYPE: Floppy disk
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 Local Similarity
mes 35; Conserv
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ZIP: 10036-2711
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TELEFAX: (212) 869-9741/8864
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NO. 6258782
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Guthrie, Kelly
Merutka, Gene
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1155 Avenue of the Americas
 Conservative
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                 97.0%;
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97.2%;
                 Score 191;
Pred. No. 9.
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Pred, No. 9.3e-18;
0; Mismatches 1
Mismatches
                                  DB 4;
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1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF

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CURRENT APPLICATION DATA:

SOFTWARE:

PatentIn Release #1.0, Version #1.30

US/08/475,668A

APPLICATION NUMBER: FILING DATE: 07-JUN

07-JUN-1995

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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                NAME: COTUZZI, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7872
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                  INFORMATION FOR SEQ
                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,551A
FILING DATE: 07-UN-1995
                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7877
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: METHODS FOR INHIBITION OF MEMBRANE
TITLE OF INVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING INFLUENZA VIRUS
TITLE OF INVENTION: TRANSMISSION
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                                                                                                                                       CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura h
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SEQUENCE CHARACTERISTICS:
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                CITY: New York
STATE: New York
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                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
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es 35; Conservative
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Langlois, Alphonse J.
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                ID NO: 1:
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97.2%;
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Pred. No. 9.3e-18;
0; Mismatches 1;
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                                                            Matches
                                                                            Query Match
Best Local S
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                   TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
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                                                                                                                                                                                                                                                                                         NAME: COTUZZÍ, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/0
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CORUZZI, Laura A.
                                                                                                                                   TOPOLOGY: unknown MOLECULE TYPE: peptide
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TITLE OF INVENTION:
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                1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                         Similarity
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Y: USA
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1155 Avenue of the Americas
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(212) 869-9741/8864
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Langlois, Alphonse J.
VENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE
VENTION: FUSION-ASSOCIATED EVENTS, INCLUDING EPSTEIN-BARR VIRUS
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97.2%;
                                                                         97.0%;
97.2%;
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                                                                                                                                                                                                                                                                                                             7872-030
                                                                          Score 191; DB 3;
Pred. No. 9.3e-18;
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                                                            Mismatches
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                                                                                       Length 36;
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                                                            Indels
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YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36

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                                                                                                                                                             RESULT 6
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                                                                                                                                                                                                                                                                                                                                          US-08-484-223B-1
                                                                                                             Sequence 1, Applic Patent No. 6054265
                                                                                                                            Sequence
                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                      Best Local Similarity
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                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (212) 869-974
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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APPLICANT: Langlois,
TITLE OF INVENTION:
TITLE OF INVENTION:
                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,223B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET:
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                                                                                                                                                                                                                            1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
                                                                                                                            Application US/08919597
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(212) 869-9741/8864
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Langlois, Alphonse J.
                                                             Bolognesi, Dani P. Matthews, Thomas J.
                                                                                                                                                                                                                                                                           Conservative
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Petteway,
                               Barney, Shawn O.
                                                Wild, Carl T.
Lambert, Dennis M.
Petteway, Stephen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPOSITIONS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HIV TRANSMISSION
245
                                                                                                                                                                                                                                                                                          97.0%;
97.2%;
                                                                                                                                                                                                                                                                                          Score 191; DB 3;
Pred. No. 9.3e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7872-029
                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                       Length 36;
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Best Local S
Matches 35
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (212) 869-974
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Langlois, TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                           APPLICANT: Barney, Shawn O.
APPLICANT: Lambert, Dennis M.
APPLICANT: Petteway, Stephen R.
APPLICANT: Petteway, Stephen R.
TITLE OF INVENTION: COMPOSITIONS FOR INHIBITION OF MEMBRANE
TITLE OF INVENTION: FUSION-ASSOCIATED EVENTS, INCLUDING INFLUENZA VIRUS
TITLE OF INVENTION: TRANSMISSION
NUMBER OF SEQUENCES: 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIF: 1000 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: FLOPPY COMPATING SYSTEM: PC-DOS/MS-DOS
                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
TOPOLOGY: unknown
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 06 FILING DATE: 06-JUN-1995 ATTORNEY/AGENT INFORMATION: NAME: COTIZZI, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                               CORRESPONDENCE ADDRESS
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COMPUTER:
OPERATING
                                                                                                                   STREET: 1155 A
CITY: New York
STATE: New Yor
                                                                            COUNTRY: USA
ZIP: 10036-2711
                                                                                                                                                    ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 30, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/919,597 FILING DATE:
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Local Similarity 97.2%;
les 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08475668A
                                                                                                                     New York
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1155 Avenue of the Americas
IBM PC SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (212) 790-9090
(212) 869-9741/8864
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VENTION: METHODS AND COMPOSITIONS FOR INHIBITION
VENTION: OF MEMBRANE FUSION-ASSOCIATED EVENTS, II
VENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
PC-DOS/MS-DOS
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US-09-071-877-1
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                                                                                                                    Sequence 1, Application US/09071877 Patent No. 6015881
                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                         Matches
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APPLICANT: Merutka, Gene
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEPTIDE SYNTHESIS
FILE REFERENCE: 7872-050
                                                                                                                                                                                                                                                                                                                                     08-486-099-1
                                            APPLICANT:
                                                                       APPLICANT: Kang, Myung-Chol
APPLICANT: Bray, Brian
                                                            APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: ui
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REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/00 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Rel
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TITLE OF INVENTION:
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STATE: New Yor
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10036-2711
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Coruzzi, Laura A.
Coruzzi, Sarra A.
78
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                                          Lichty, Maynard
Mader, Catherine
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                                                                                                                                                                                                                                                                                                                                                                                                            36 amino acids
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Lambert, Dennis M.
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                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                 unknown
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97.2%;
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                                                                                                                                                                                                                                                                                       Score 191;
Pred. No.
                                                                                                                                                                                                                                                                         Mismatches
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9.3e-18;
                                                                                                                                                                                                                                                                                                       Length 36;
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В
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; ORGANISM: Human immunodeficiency virus
US-09-071-877-1
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                                                        US-08-360-107A-1
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                        Query Match
Matches
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CURRENT FILING DATE: 1998-05-01
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                                                                                                                                             SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
COMPUTER: DAMPORED POSSIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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                                                                      MOLECULE TYPE:
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les 35; Conserv
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                                                                                                                                                                                                                                                 REGISTRATION NUMBER:
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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score greater than or equal to the score of the result being printed.
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A; Status: pre.....
A; Molecule type: DNA
A; Rosidues: 1-292,'X', 294-357 <STE2>
A; Cross-references: EMBL:X61353; NID
A; Cross-references: EMBL:X61353; NID
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A;Residues: 1-358 <STE1>
A;Residues: 1-358 <STE1>
A;Cross references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; PID:g60183
A;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.
AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency virus type 1 in 1
A;Reference number: S70417; MUID:92144209; PMID:1736940
A;Accession: S70425
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                                                                                                                                                             A;Cross-references: EMBL:X61353; NID:g60188; PIDN:CAA43618.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59. jmmunodeficiency virus A;Telle: Distinct populations of human immunodeficiency virus A;Reference number: S70417; MUID:92144209; PMID:1736940 A;Accession: S70419
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A; Residues: 1-222, 'X', 224-358 <STE2>
A; Cross-references: EMBL.X61359; NID: 960182; PIDN: CAA43630.1;
C; Superfamily: type E retrovirus env polyprotein
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A; Residues: 1-357 <STE1>
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A;Description: Distinct populations of HIV-1 in blood and cerebrospinal fluid as
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    357;
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2003, 11:25:09

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C:Species: human immunodefi
C:Date: 16-Jul-1999 #sequer
C:Accession: T09448
R:Pang, S.; Vinters, H.V.;
                                                                                                                                                     A;Molecule type: DNA
A;Residues: 1-847 <OBR>
C;Superfamily: type E retrovirus env polyprotėin
                                                                                                                                                                                                                                                                                                                                                       env protein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   envelope glycoprotein - human immunodeficiency virus type 1 (strain JRFL) C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 24-Nov-1999
                                                                                                                                                                                                                                    A; Reference number: A; Accession: S13289
                                                                                                                                                                                                                                                                                               R;O'Brien, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, Nature 348, 69-73, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
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C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-847 <PAN>
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A; Accession: T09448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DЬ
                                                                                                                                                                                                                                                     A; Title: HIV-1 tropism for mononuclear phagocytes can be determined by regions of gpl
A; Reference number: S13288; MUID:91043044; PMID:2172833
                                                                                                                                                                                                                                                                                                                                          C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Status: preliminary; translated from GB/EMBL/DDB.
                                                                                                                                                                                                                    A; Status: preliminary
                                                                                                 Query Match
Best Local
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Best Local :
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                                                                               Matches
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629 YTSEIYTLIEESQNQQEKNEQELLELDKWASLWNWF
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                  1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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                                                                                               Similarity
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88.9%;
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88.9%;
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                                                                                               Score 176;
Pred. No. 4
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4.4e-13;
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                                                                                                                  Length 847;
                                                                               Indels
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C;Accession: S21994; S70421
R;Steuler, H.; Storch-Hagenlocher, E
submitted to the EMBL Data Library,
A;Description: Distinct populations
A;Reference number: S21990
A;Accession: S21994
                                                                                                                                                                                                                                                                      C;Species: human immunodeficiency virus A;Variety: isolate 27B C;Date: 20-Feb-1995 #sequence_revision
A; Molecule type: 1
A; Residues: 1-357
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A;Reference number: A28922;
A;Accession: B28922
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Cell 45, 637-648, 1986
                                                                                                                                                                                                                                                                                                                                           envelope protein gp120/gp41 - human immunodeficiency virus type
C;Species: human immunodeficiency virus type 1, HIV-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             env polyprotein precursor - human immunodeficiency virus
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A; Residues: 1-856 <STA>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Superfamily: type E retrovirus env polyprotein; superfamily: type E retrovirus env polyprotein; polyprotein; transmembrane prote; Reywords: capsid protein; captain; siyoprotein; polyprotein; superfamily: signal sequence #status predicted <SIG>
1-29/Domain: signal sequence #status predicted <EPP>

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Species: human immunodeficiency virus type 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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164, 531-536, 1988
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                                                                                                                                                                                                    Storch-Hagenlocher, B.; Wildemann, B.;
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91.7%;
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91.7%;
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No. 6.6e-14;
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Pred. No. 6.6e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G.;
                                                                                                                                                                       Jul
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                                                                                                                                      'n
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A;Cross-references: EMBL:AULUL,
R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, L.
AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency
A;Title: Distinct populations of human immunodeficiency
A;Title: Distinct populations of human immunodeficiency
A;Title: Distinct populations of human immunodeficiency
                                       C;Superfamily: type E retrovirus env polyprotein C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodefi F;1-30/Domain: signal sequence #status predicted <SIG> F;31-509/Product: exterior membrane glycoprotein #status predicted <EXT>
F;510-855/Product: transmembrane glycoprotein #status F;87,129,140,158,184,190,200,244,265,292,298,304,334,3
                                                                                                                                           A; Gene:
                                                                                                                                                            C; Genetics:
                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-855 <SAN>
                                                                                                                                                                                                                                                    A; Reference number: A; Accession: A03976
                                                                                                                                                                                                                                                                         A; Title: Nucleotide sequence and expression of an AIDS-associated A; Reference number: A04003; MUID:85090453; PMID:2578227
                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: human immunodeficiency virus type 1, HIV-1 A;Note: host Homo sapiens (man)
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C; Superfamily:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-357 <ST2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A; Title: Distinct populations of human immunodeficiency
A; Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            envelope protein gp120/gp41 - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb1J95  #sequence_revision 20-Feb-1995  #text_change C;Accession: S70422; S21996
                                                                                                                                                                                   A; Cross-references: GB: K02007;
                                                                                                                                                                                                                                                                                                                          Science 227, 484-492, 1985
                                                                                                                                                                                                                                                                                                                                                                  C; Accession: A03976
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A;Residues: 1-140,'X',142-312,'X',314-357 <STE2>
A;Cross-references: EMBL:X61355; NID:g60179
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                               R; Sanchez-Pescador,
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53-59, 1992
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Pred. No.
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                                                                                                                                                                                     PIDN: AAB59882.1;
n #status predicted <TMM>,304,334,341,358,364,388,394,400,408,445
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nberger, J.A.; Papas, T.S.; (
Nature 313, 277-284, 1985
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A; Residues: 1-856 <R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Title: Nucleotide sequence of A;Reference number: A90866; MUII A;Accession: A03975
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C; Date: 17-May-1985 #sequence_r
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A;Cross-references: GB:
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N; Alternate name
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Best Local
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-51/Product: exterior membrane glycoprotein #status predicted <EXT>
-71/Product: exterior membrane glycoprotein #status predicted <TMM>
-856/Product: transmembrane glycoprotein #status predicted <TMM>
-8,336,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,404
-8,336,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sonigo,
  coat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GB:M15654; GB:K02008;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #sequence_revision 17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      s.; Ghrayeb,
polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97.5%;
                                                                                                                                                                                                            97.5%;
97.2%;
                  immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      iciency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P.; Danos,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MUID:85099333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patarca,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 192; DB Pred. No. 5.6e 1; Mismatches
                                                                                                                                                                                                              Pred.
                                                                                                                                                                                                              Score 192;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J.;
                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R.; Livak, K.J.;
J.; Chang, N.T.; G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                o
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         virus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GB:K02009;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cole,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PMID: 2981635
                  virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
6e-15;
                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                              6e-15;
                                                                                                                  678
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV-1
                  type 1 (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alizon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GB:K02010; NID:g326383;
                                                                                                                                                                                                                            Length 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gallo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Starcich, B. Gallo, R.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HTLV-III
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                type 1 (isolate LAV-la).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (isolate HTLV-III,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Josephs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIDN: AAA44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
N;Contains: coat protein gp120; coat protein gp41
C;Species: human immunodeficiency virus type 1, H
C;Date: 30-Sep-1988 #sequence_revision 30-Sep-198
                                                                            RESULT
VCLJ3W
                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VCLJVL
                                                        env polyprotein
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precursor

human immunodeficiency virus

type

(isolate WMJ1)

-Sep-1988

#text_change

HIV-1

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A; Note:
C; Date:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991 A; Title: Evolution of human immunodeficiency virus type A; Reference number: A41621; MUID:92107924; PMID:1763038 A; Accession: C41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Gene: env
A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency; polyp
C;Keywords: AIDS; capsid protein gp120 (fragment) #status predicted <GP1>
F;1-251/Product: coat protein gp120 (fragment) #status predicted <GP2>
F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2>
F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; PIDA;Note: this virus was isolated from the mother's sexual partner C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Accession: (R; Burger, H.;
                                                                                                                                            N;Contains: amino end of coat protein gp41; carboxyl end C;Species: human immunodeficiency virus type 1, HIV-1
                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:K02083; NID:g555008; PIDN:AAB59873.1; C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Date: 17-May-1985 #sequence_revision C; Accession: A03974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Species: human immunodeficiency virus type 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;424-443/Domain: transmembrane #status predicted <TMN>F;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Residues: 1-443 <BUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                        A; Molecule t
A; Residues:
                                                                                                                                                                                                                                                                                                                                                                           A; Reference number: A93355; A; Accession: A03974
                                                                                                                                                                                                                                                                                                                                                                                                                   Nature 313, 450-458, 1
A; Title: Nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N;Alternate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                          R; Muesing, M.A.;
                                                                         Best Loc
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  378 YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-Feb-1993 #sequence_revision 31-Dec-1993 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    host Homo sapiens (man)
                                                                                          Local
YTSLIHSLIEESQNQQEKNEQELLELDKWANLWNW
                                   YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNW 35
                                                                                                                                                                                                                                                                                                                                            type: DNA: 1-856 <M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Smith,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                            <MUE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     coat
                                                                                                                                                                                                                                                                                                                                                                                                                                       1985
                                                                                                                                                                                                                                                                                                                                                                                                 structure and expression of the 93355; MUID:85111157; PMID:298210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                        D.H.; Cabradilla, C.D.; Benton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92.9%;
91.7%;
                                                                                          92.9%;
94.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 183;
Pred. No. 3.
                                                                                          Score 183;
Pred. No. 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunodeficiency virus type 1 (isolate
                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                     PMID: 2982104
                                                                     DB 1,
6.6e-14;
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; I
3.1e-14;
nes 0;
 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nguyen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 443
                                                                                                            Length 856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                          C.V.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P.N.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coat
                                                                                                                                                                                                                                                                                                                                                                                                                     AIDS/lymphadenopathy
                                                                                                                                                                                                                                                                                                                          PID:g328559
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lasky, L.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gibbs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein gp120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                             0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Capon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
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Post-processing: Minimum Match 08
Maximum Match 10
Listing first 45
                                                                            Minimum DB
Maximum DB
                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                             OM protein - protein search, using sw model
                                                                                                                                                                        Searched:
                                                                                                                              hl number of hits satisfying chosen parameters:
                                                                          seq length: 0 seq length: 2000000000
                                                                                                                                                                                                       BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                  May 16, 2003, 11:04:54 ; Search time 12.1446 Seconds (without alignments) 284,970 Million cell updates/sec
                                                                                                                                                                     283224 seqs, 96134422 residues
                                                                                                                                                                                                                                                                                  US-09-623-533A-535
197
                                                                                                                                                                                                                                                               YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                       Gapext 0.5
   100%
45 summaries
                                                                                                                                                                                                                                                                 36
                                                                                                                                    283224
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Database: PIR_73:*

1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
Pred. No. is the number of results predicted by chance to have a

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	192		851	ນໍ່	S33985	env polyprotein -
2	192	97.5	854	N	1328	
ω	192		856	1	VCLJH3	polyprotei
4	192		861	_	VCLJLV	polyprotein
5	183		443	N	C41621	polyprotein
6	183		856	٢	VCLJVL	polyprotein
7	183		856	ш	VCLJ3W	polyprotein
80	183		861	_	VCLJSC	
9	182		357	N	S21994	\neg
10	182		357	N	S21996	envelope protein g
11	181		855	۳	VCLJA2	~
12	180		358	N	S21998	protein
13	177		357	Ŋ	S22004	envelope protein g
14	176		847	N	T09448	envelope glycoprot
15	176		847	N	S13289	env protein - huma
16	175		357	N	S21992	envelope protein g
17	175		445	N	A41621	env polyprotein M
18	175		843	سر	H44001	env polyprotein pr
19	175		852	Н	VCLJBR	
20	174		357	N	S22006	J
21	174		358	N	S22002	protein
22	174		358	N	S22000	
23	174		358	N	S70417	protein
24	174		852	N	T12016	glycopro
25	174		853	N	S54384	
26	174		855	۳	VCLJZR	env polyprotein pr
27	174		859	ш	VCLJMN	polyprotein
28	173		729	1	VCLJKX	
29	173	87.8	861	1	VCLJKB	

RESULT VCLJH3

ALIGNMENTS

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B
                                      δõ
                                                                                                                                                           A;Molecule type: DNA
A;Residues: 1-854 <OBR>
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                A;Title: HIV-1 tropism for mononuclear phagocytes can be determined by regions of gp1 A;Reference number: S13288; MUID:91043044; PMID:2172833 A;Accession: S13288
                                                                                                                                                                                                                                                                                                            env protein - human immunodeficiency virus type 1 G:Species: human immunodeficiency virus type 1, HIV-1 C:Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997 C:Accession: S13288 R:O'Bilen, W.A.; Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, A.; Idler, Nature 348, 69-73, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
S13288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        env polyprotein - human immunodeficiency virus type 1
c;Species: human immunodeficiency virus type 1, HTV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999
C;Accession: S33985
R;Carlini, F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
S33985
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A;Residues: 1-851 <CAR>
A;Cross-references: EMBL:Z11530; NID:g60192; PIDN:CAA77628.1; PID:g60199
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: S33985
A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               submitted to the EMBL Data Library, November 1991 A; Reference number: S33979
                                                                                                                                                                                                                          A; Status: preliminary
                                                                                                     Best
                                                                                  Matches
                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
636 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 671
                                                                                y Match 97.5%;
Local Similarity 97.2%;
hes 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                   1 YTNLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97.5%;
                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۲:
                                                                             Score 192; DB 2;
Pred. No. 5.6e-15;
1; Mismatches C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 192; DB 2;
Pred. No. 5.6e-15;
1; Mismatches 0;
                                                                                                                    Length 854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 851;
                                                                                  Indels
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                                                                                                                                                                                                                                                                                                                                  A.; Idler, K.; Zack,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                Gaps
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envelope protein gp120/gp41 - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 28
                                                                                                                                                                                                                                                            A:Steuler, H.; Storch-Hayenarounder R:Steuler, H.; Storch-Hayenarounder 1992
AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A:Title: Distinct populations of human immunodeficiency virus
A:Title: Distinct populations of human immunodeficiency virus
A:Title: Distinct populations of human immunodeficiency virus
A:Title: Distinct populations of human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991
A;Description: Distinct populations of HTV-1 in blood A;Reference number: S21990
A;Accession: S21998
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C; Species: h
                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000 C;Accession: S21998; S70425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;20-500/Product: exterior membrane glycoprotein #status predicted <EXT>
F;501-855/Product: transmembrane glycoprotein #status predicted <TMM>
F;87,129,140,145,154,158,186,189,199,236,243,264,278,291,297,333,340,355,386,392,398,404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R; Srinivasan, A.;
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밁
                                                                                                                                                                    A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630.1; C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-222, 'X', 224-358 <STE2>
                                                                                                                                                                                                                                                          A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Residues: 1-855 < A;Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-855 <SRI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Title: Molecular characterization of human
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                                                                                                                           Query Match
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teuler, H.; Storch-Hagenlocher, B.; Wildemann,
S Res. Hum. Retroviruses 8, 53-59, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        uperfamily: type E retrovirus env polyprotein
pywords: AIDS; capsid protein; coat protein; glycoprote
19/Domain: signal sequence #status predicted <SIG>
0-855/Product: env polyprotein #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                              olecule type: DNA
bsidues: 1-358 <STE1>
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140
                                                                                                      Local
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                                    YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTGLIYRLIEESQTQQEKNEQELLELDKWASLWNWF 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
YTSLIYTLIEQSQNQQEKNEQELLELDKWASLWNWF 175
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                                                                                                      Similarity
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                                                                                  Conservative
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91.7%;
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Pred. No. 8.
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                                                                                                                      Score 179;
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                                                                                                      No.
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                                                                                                                                                                                                                                                                                                                                                                     PIDN:CAA43630.1; nann, B.
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                                                                                                                           DB 2;
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RESULT 14 VCLJND

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A;Note: host Homo sapiens (man)
C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 16-Jul-1999
C;Accession: JQ0066
R;Spire, B; Sire, J; Zachar, V.; Rey, F.; Barre-Sinoussi, F.; Galibert, F
R;Spire, B; Sire, J, 1989
Gene 81, 275-284, 1989
                                                                                                                                                                                                                                                                                                                 A;Cross-references: EMBL:X61353; NID:g60188; PIDN:CAA43618.1; R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency virus A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991 A:Description: Distinct populations of HIV-1 in blood A;Reference number: S21990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Variety: isolate 4B
C; Date: 20-Feb-1995 #sequence_revision
C; Accession: S22004; S70419
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F;502-946/Product: coat protein gp41 #status predicted <CP2>
F;502-520/Domain: transmembrane #status predicted <TM1>
F:674-692/Domain: transmembrane #status predicted <TM2>
F:87,129,151,179,182,229,236,257,271,284,290,351,382,388,392,395,401,438,451,452,601,
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C;Superfamily: type E retrovirus env polyprotein
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein;
E;1-29/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: GB:M27323; NID:g328154; PIDN:AAA44873.1; A;Note: the authors translated the codon GCG for residue 523 C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Title: Nucleotide sequence of HIV1-NDK: a R;Reference number: JQ0065; MUID:90034200; F A;Accession: JQ0066
A;Molecule type: DNA
A;Residues: 1-846 <SPI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N; \mbox{Contains: coat protein gp120; coat protein $C; \mbox{Species: human immunodeficiency virus type}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    envelope protein gp120/gp41 - human immunodeficiency virus
C;Species: human immunodeficiency virus type 1, HIV-1
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                                                                                                                                                                                A;Cross-references: EMBL:X61353; NID. C;Superfamily: type E retrovirus env
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A; Residues: 1-357 <STE1>
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  Вb
                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-292, 'X', 294-357 <STE2>
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Matches
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YTDLIYSLIEESQNQQEKNEQELLALDKWANLWNWF
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                                                                                        Conservative
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                                                                                                           88.8%;
88.9%;
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91.78;
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Pred. No. 1.5e-13;
                                                                                                             Pred.
                                                                                                                              Score 175;
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                                                                                        Mismatches
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                                                                                                           NO.
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1, HIV-1
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as Arg
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A; Molecule type: DNA
A; Residues: 1-856 KM
A; Cross-references: C; Genetics:
A; Gene: env
C; Superfamily: type F
C; Keywords: AIDS; cap
F; 1-30/Domain: signal
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C; Superfamil
C; Keywords:
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A; Molecule type: DNA
A; Residues: 1-856 <S'
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C; Superfamily:
                                                                                               A;Title: Envelope sequences of two new Uni A;Reference number: A28922; MUID:88219542; A;Accession: B28922
                                                                                                                                                     C;Accession: B28922
R;Gurgo, C.; Guo, H.G.; Fran
Virology 164, 531-536, 1988
                                                                                                                                                                                                                N;Alternate names: coat polyprotein C;Species: human immunodeficiency virus A;Note: host Homo sapiens (man) C;Date: 31-Dec-1990 #sequence_revision:
                                                                                A; Molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: GB:K03455; GB:M38432; C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Starcich, B.R.; Hahn, B.H.; Shaw, G.M.; McNeely, P.D.; Modrow, Cell 45, 637-648, 1986
A;Title: Identification and characterization of conserved and var A;Reference number: A24774; MUID:86218077; PMID:2423250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                            A; Residues:
                                                                                                                                                                                                                                                                                                 env polyprotein
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VCLJ3W
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;Keywords: coat protein; glycoprotein; polyprotein; tr;1.29/Domain: signal sequence #status predicted <SIG>;30-501/Product: coat protein gp120 #status predicted;502-847/Product: coat protein gp41 #status predicted;502-847/Product: coat protein gp41 #status predicted;87,134,140,151,155,183,197,234,241,262,276,289,295,33
                                          Genetics:
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512-856/Product: transmembrane glycoprotein #status predicted <TMM>
88,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,40
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Residues: 1-856 <M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ins: coat protein gp120; coat protein gp41 es: human immunodeficiency virus type 1, HIV-1 30-Sep-1988 #sequence_revision 30-Sep-1988 #t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNW
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                                                            type: I
: 1-861
type
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                                                          DNA
1 <GUR>
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  retrovirus
                                                                                                                                                                           Franchini,
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91.7%;
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Pred. No. 4.9e-14;
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Pred. No. 4.
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                                                                                                                     new United States HIV-1
3219542; PMID:3369091
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polyprotein
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                                                                                                                                                                         Aldovini, A.;
                                                                                                                                                                                                                31-Dec-1990 #text_change 16-Feb-1997
                                                                                                                                                                                                                                                        type 1,
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.9e-14;
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YTGLIYRLIEESQTQQEKNEQELLELDKWASLWNWF

36 670

В

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C:Species: human ......
A;Variety: isolate 27B
A;Variety: isolate 27B
C;Date: 20-Feb-1995 #sequence_revision
C;Date: 30-Feb-1994; S70421
77770-Hagenlocher, B.;
                                                                                                                                                                                                                                   envelope polyprotein - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HTV-1 C;Date: 15-Jul-1995 #sequence_revision 01-Sep-1995 #text_C;Accession: S54384 R;Theodore, T.; Buckler-White, A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                     QУ
                                                                       C; Superfami
C; Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992
A;Title: Distinct populations of human immunodeficiency
A;Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Description: Distinct populations of HIV-1 in A; Reference number: S21990
A; A; Cosesion: Coron
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                                                                                                                            A; Molecule type: genomic A; Residues: 1-853 <THE>
                                                                                                                                                                                  A; Reference number: A; Accession: S54384
                                                                                                                                                                                                   submitted to the EMBL Data A; Reference number: S54377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-140, 'X', 142-312, 'X', 314-357 <STE2>
A; Cross-references: EMBL: X61355; NID: g60179
C; Superfamily: type E retrovirus env polyprotein
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A; Residues: 1-357 <STE1>
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                                                                                        Cross-references: EMBL:M22639;
Superfamily: type E retrovirus
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                    Query Match
Best Local
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 Conservative
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immunodeficiency virus
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91.7%;
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91.78;
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91.7%;
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                                                                                      NID:g329377; PI
env polyprotein
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2; Mismatches
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                                 180;
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                DB 2;
.6e-14;
                                                                                                           PIDN: AAA45370.1;
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c; Species: human
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C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polypro
E;1-30/Domain: signal sequence #status predicted <SIG>
F;31-516/Product: exterior membrane glycoprotein #status predicted <EXT>
F;317-861/Product: transmembrane glycoprotein #status predicted <EXT>
F;517-861/Product: transmembrane glycoprotein #status predicted <TMM>
F;888.136,141,146,161.165,191,202.239,246,267,281.294.30,306.337,344,361.391,397,402,41
F;8616,621,630,642,679,755,821/Binding site: carbohydrate (Asn) (covalent) #status predic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R; Wain-Hobson, S.; 1
Cell 40, 9-17, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nberger, J.A.; Papas, T.S.; Ghrayeb, Nature 313, 277-284, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Title: Nucleotide sequence of the AIDS v. A; Reference number: A90866; MUID:85099333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-856 < RAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R; Ratner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession: A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N; Alternate names:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Reference number: A90866; A; Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:M15654; GB:K02008; GB:K02009;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Superfamily: type E retrovirus env polyprotein Keywords: AIDS; capsid protein; coat protein;
                                                                                                                                                                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     esidues: 1-861 <WAI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polyprotein precursor - human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oss-references: GB:K02013; NID:g326417; PIDN:AAB59751.1; PID:g326424
                                                                                                                                    643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 638 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 673
                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             host Homo sapiens (man)
                                                                                                                                                                           YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                L.; Haseltine, W.; Patarca,
                                                                                                                                    YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         precursor
gp120/gp41 - human
immunodeficiency vi
                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sonigo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           coat polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.0%;
97.2%;
                                                                                                                                                                                                                                          97.0%;
97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human
                                                                                                                                                                                                                                            Score 191; DB 1;
Pred. No. 4.1e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 191;
    virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 4e-15;
immunodeficiency
irus type 1, HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J.; Chang,
                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R.; Livak, K.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    type 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               virus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cole,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PMID:2981635
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                                                                                                                                    678
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N.T.; Gallo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIV-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alizon,
                    virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GB:K02010; NID:g326383;
                                                                                                                                                                                                                                                                 Length 861;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Starcich,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HTLV-III
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              type 1 (isolate HTLV-III,
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                  type
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                       \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                       0
                    (patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wong-Staal,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Josephs,
                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIDN: AAA442
                                                                                                                                                                                                                       0;
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                                                                                                                                                                                                                                                                                                                                                                                                                        polypro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BH10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp F;1-25L/Product: coat protein gp120 (fragment) #status predicted <GP1> F;252-443/Product: coat protein gp41 (fragment) #status predicted <GP2> F;424-443/Domain: transmembrane #status predicted <TMN> F;9,23,36,48,78,101,107,131,137,143,147,153,188,200,203,351,356,365,377/Binding site:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Reference number: A41621; MUID:92107924; PMID:1763038 A;Accession: C41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.; Nguyen, Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Date: 20-Feb-1995 #sequence_revision C;Accession: S70422; S21996
                    A; Title: Nucleic acid structure and expression of the human AIDS/lymphadenopathy A; Reference number: A93355; MUID:85111157; PMID:2982104
                                                              C; Accession: A03974
R; Muesing, M.A.; Smith, D
Nature 313, 450-458, 1985
                                                                                                                               A;Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                              env polyprotein precursor - human immunodeficiency virus
N;Alternate names: coat polyprotein
                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Gene:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; PID:g555015 A;Note: this virus was isolated from the mother's sexual partner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Accession: C41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Note: host Homo sapiens (man) C; Date: 11-Feb-1993 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N, \mbox{Alternate names: coat polyprotein} \\ N, \mbox{Contains: amino end of coat protein}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C41621
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Experimental source: patient 27L A; Note: submitted to the EMBL Data Library, C; Superfamily: type E retrovirus env polypro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: EMBL:X61356;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-357 <ST2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Reference number: A; Accession: S70422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AIDS Res. Hum. Retroviruses 8, 53-59, 1
A; Title: Distinct populations of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Steuler, H.;
                                                                                                                                                                       C; Species: human immunodeficiency virus type 1,
                                                                                                                                                                                                                                                                   RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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les 33; Conser
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                                                                                                                                                                                                                                                                                                                                YTSLIYNLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1-443 <BUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Storch-Hagenlocher, B.; Wild
Retroviruses 8, 53-59, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   opulations of human immunodeficiency $70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human immunodeficiency virus type 1 (fragment)
                                                                                   D.H.; Cabradilla,
                                                                                                                                                                                                                                                                                                                                                                                                                                             92.48;
91.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 182; DB 2; Pred. No. 2.3e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 3.56
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 188;
                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-Dec-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         type 1, HIV-1
                                                                                     C.D.;
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#text_change 26-Aug-1999

of coat protein

gp120

1 nucleotide sequence

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P.N.; Gibbs,

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Benton,

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Lasky, L.A.; Capon,

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GenCore version 5.1.4_p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2003, 11:04:54; Search time 12.1446 Seconds
(without alignments)
284.970 Million cell updates/sec

Title: US-09-623-533A-534
Perfect score: 197
Sequence: 197
Sequence: 1 YTGLIHSLIEESQNQOEKNEQELLELDKWASLWNWF 36
Scoring table: BLOSUM62
Gapop 10,0, Gapext 0.5
Searched: 283224 seqs, 96134422 residues

1 number of hits satisfying chosen parameters: 283224
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	191	97.0	851	2	3398	env polyprotein -
2	191	97.0	854	N	S13288	protein -
ω	191	7.	856	\vdash	СГЛН	polyprotei
4	191	7.	861	ب	VCLJLV	polyprotein
5	188	5	357	Ν	S21996	elope protein
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10	.180	1.	357	2	S21994	=
11	180	1.	. 853	2	S54384	polyprot
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13	179	0	358	N	S21998	=
14	178	90.4	846	\vdash	VCLJND	רסי
15	175	8	357	2	S22004	envelope protein g
16	175		847	2	T09448	
17	175	8	847	2	S13289	
18	175	.8	855	1	VCLJA2	tei
19	174	8	445	N	A41621	
20	173	7.	358	N	S22002	Þ
21	173	.7	358	N	S22000	
22	173	7.	358	N	S70417	protein
23	173	7.	852	N	T12016	glycopro
24	173	7 .	859	Н	VCLJMN	protein p
25	173	7 .	859	N	T01672	
26	172	7.	357	N	S22006	
27	172	.7	843	μ.	H44001	protein p
28	169	85.8	357	N	S21992	٥,
29	169	ŗ	852	Н	VCLJBR	

RESULT 3 VCLJH3

ALIGNMENTS

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A;Status: preliminary
A;Molecule type: DNA
A;Molecule: 1-854 <OBR>
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                    A;Title: HTV-1 tropism for mononuclear phagocytes can be determined by regions of gpl A;Reference number: S13288; MUID:91043044; PMID:2172833
A;Accession: S13288
                                                                                                                                                                                                                                                                                                                                          env protein - human immunodeficiency virus type 1. G:Species: human immunodeficiency virus type 1, HIV-1 C:Species: human immunodeficiency virus type 1, HIV-1 C:Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997 C;Accession: S13288 C;Accession: S13288 Koyanagi, Y.; Namazie, A.; Zhao, J.Q.; Diagne, A.; Idler, Nature 348, 69-73, 1990
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A;Residues: 1-851 <CAR>
A;Cross-references: EMBL:Z11530; NID:g60192; PIDN:CAA77628.1;
C;Superfamily: type E retrovirus env polyprotein
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c;Species: human immunodeficiency virus type 1, HIV-1
c;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999
c;Accession: S33985
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or send an email to license@isb-sib.ch).
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Envelope polyprotein GP160 precursor (Contains: Eglycoprotein (GF120); Transmembrane glycoprotein
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
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HIV; M17451; ENV$RF.
InterPro; IPR000328; E
InterPro; IPR000777;
GPfam; PF00516; GP120;
Pfam; PF00517; GP41; 1
AIDS; Coat protein; Po
Signal.
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13-AUG-1987 (Rel. 05, Last seq
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Envelope polyprotein GP160 pree
glycoprotein (GP120); Transmeml
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NCBI_TaxID=11701;
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                                                                M17451; E
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es; Retroid viruses; Retroviridae; Lentivirus.
                       PF00516; GP120; PF00517; GP41;
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                                                                                                an email to license@isb-sib.ch).
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91.7%;
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              SEQUENCE FROM N.A. MEDLINE=90317906;
                                            NCBI_TaxID=11690;
                                                       Human immunodeficiency
Viruses; Retroid viruse
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   Ork-Higgins
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    Cheng-Mayer
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               PubMed-2370688;
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86.1%;
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Last annotation update)
GP160 precursor [Contains: I
Transmembrane glycoprotein
                                                        virus type 1 (SF33 isolate)
es; Retroviridae; Lentivirus
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    J.A.,
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SEQUENCE FROM N.A.
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MEDLINE-86218077; PubMed-2423250;
MEDLINE-86218077; PubMed-2423250;
Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D., Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., Farks W.P., Josephs W
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P31872;
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01-JUL-1993 (Rel. 26, Last sequence
15-JUL-1999 (Rel. 38, Last annotatic
Envelope polyprotein GP160 precursor
glycoprotein (GP120); Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=31678;
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Viruses; Retroid virus
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InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A WAS PERINATALLY INFECTED BY HER MOTHER.
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Retroviridae; Lentivirus.
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InterPro; IPR000328; Env_GP41.

InterPro; IPR000777; GP120.

Pfam; PF00516; GP120; 1.
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ENV_HV1EL STANDARD; PRT; 853 AA.
P04581;
13-AUG-1987 (Rel. 05, Created)
13-AUG-1987 (Rel. 05, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane
glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
ENV.
Human immunodeficiency virus type 1 (ELI isolate) (HIV-1).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11689; .
[1]
SECCENCE EROM N.A.
MEDLINE=86245056; PubMed=2424612;
Alizon M., Wain-Hobson S., Montagnier L., Sonigo P.;
"Genetic variability of the AIDS virus: nucleotide sequence analysis
of two isolates from African patients.";
Cell 46:63-74(1986).
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or send an email to license@isb-sib.ch).
EMBL; K03454; AAA44329.1;

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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains:
glycoprotein (GP120); Transmembrane glycoprotein
SEQUENCE FROM N.A MEDLINE-88219542;
                          Human immunodeficiency Viruses; Retroid viruse NCBI_TaxID-11702;
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EMBL; M17450; -; NOT_ANNOTATED_CDS.
PIR; B28922; VCLJSC.
HIV; M17450; ENVSC.
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
ALDS; Coat protein; Polyprotein; Glycology
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-i- MISCELLANEOUS: THE SC ISOLATE WAS TAKEN F
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MEDLINE-90347835; PubMed-2384920;
MEDLINE-90347835; PubMed-2384920;
Cheng-Mayer C., Quiroga M., Tung J.W., Dina D., Levy J.;
Cheng-Mayer C., Quiroga M., Tung J.W., Dina D., Levy J.;
"Viral determinants of human immunodeficiency virus type
"Viral determinants of human immunodeficiency virus type
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HIV; M38428; ENV$SF162.
InterPro; IPR0003777; GP120.
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NCBI_TaxID=11691;
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polyprotein GP160 precursor (Contains: Exterior membrane
tein (GP120); Transmembrane glycoprotein (GP41)].
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Nature 313:450-458(1985).
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Pfam; PF005516; GP120; 1.
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EMBL; A04321; CAA00352.1;
PIR; A03975; VCLJLV.
HIV; K02013; ENV$BRU.
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01-FEB-1991 (Rel. 17, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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P19551;
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J. Virol. 64:3792-3803(1990).
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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m; PF00516; GP120; 1.
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GlycoSuiteDB;
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NCBI_TaxID=11686;
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                                                                              immunodeficiency virus type
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35; Conser
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GP160 precursor [Contains:
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RESULT

SOFFIE

Exterior membrane n (GP41)].

Length Indels

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13-AUG-1987 (Rel. 05, 0
15-JUL-1999 (Rel. 38, 1
30-MAY-2000 (Rel. 39, 1
Envelope polyprotein GE
glycoprotein (GP120); 7
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SIGNAL
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Ratner L., Fisher A., Jagodzinski L.L., Mitsu
Gallo R.C., Wong-Staal F.;
"Complete nucleotide sequences of functional
virus.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gallo R.C., Wong-Staal F.;
Submitted (APR-1997) to the
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NCBI_TaxID=11706;
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InterPro; IPR000777; GP120.
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SP160 precursor [Contains: Exterior membrane
Transmembrane glycoprotein (GP41)].
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! F.;
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es; Retroviridae; Lentivirus
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                                                                                                                                                                                                                                                                                                                                                                the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-85228248; PubMed-2988795; Crowl R., Ganguly K., Gordon M., Conroy R., Shaw G.M., Wong-Staal F., Reddy E.P.; "HTLV-III env gene products synthesized in E antibodies present in the sera of AIDS patie Cell 41:979-986(1985).
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                                                                                                                                                                                                                                                                                                                         EMBL; M14100; AAA44679.1; -. HIV; M14100; ENV$HXB3.
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glycoprotein
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InterPro; IPR000777; GP120
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996 (Rel. 33, Last sequence update)
999 (Rel. 33, Last annotation update)
999 (Rel. 38, Last annotation update)
polyprotein GP160 precursor [Contains: Exterior membrane
tein (GP120); Transmembrane glycoprotein (GP41)].
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SEQUENCE FROM N.A.

MEDLINE-85111123; PubMed=2578615;

Ratner L., Haseltine W., Patarca R., L.

Josephs S.F., Doran E.R., Rafalski J.A.

Josephs S.F., Ivanoff L., Petteway S.I

Baumeister K., Ivanoff L., Petteway S.I

Lautenberger J.A., Papas T.S., Ghrayeb

Wong-Staal F.;
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NCBI_TaxID=11678;
[1]
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane glycoprotein (GP120); Transmembrane glycoprotein (GP41)]
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                                              *Assignment of intrachain disulfide bonds and characterization potential glycosylation sites of the type I recombinant human immunodeficiency virus envelope glycoprotein (gp120) expressed Chinese hamster ovary cells.*;
J. Biol. Chem. 265:10373-10382(1990).
                 This
                                                                                                                                            DISULFIDE BONDS, AND CARBOHYDRATE-LINKAGE SITES.
MEDLINB=90285159; PubMed=2355006;
Leonard C.K., Spellman M.W., Riddle L., Harris F
Gregory T.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus type 1 (BH10 isolate) (HIV-1). Viruses; Retroid viruses; Retroviridae; Lentivirus.
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SWISS-PROT entry is een the Swiss Instit
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Raffalski J.A., Whitehorn E.A.,
Petteway S.R. Jr., Pearson M.L.
S., Ghrayeb J., Chang N.T., Gal
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EMBL; M15654; AAA44205.1; -. PIR; A03973; VCLJH3. HIV; M15654; ENVSBH102. InterPro; IPR000328; Env_GP41. InterPro; IPR000777; GP120.
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Q1-MAY-2000 (TrEMBLrel. 13, Created)
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O1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Envelope glycoprotein (Fragment).
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SEQUENCE 122 A
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Caride E., Hertogs K., Larder B., Dehertogh P., Brindeiro R.,
Machado E., de Sa C.A.M., Eyer W., Passioni L.F.C., Menezes J.A.,
Calazans A.R., Tanuri A.;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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EMBL; D86068; BAA12995.1; .
InterPro; IPR000328; Env_GP41.
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
SEQUENCE 856 AA; 97287 MW; 238042A234C56685 CRC64;
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Halloran M., Axthelm M.W., Letvin N.L., Sodroski J.G.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF041850; AAD12142.1;
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
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"Spectrum of Biological Properties
(HIV-1) Isolates.";
Virology 174:103-116(1990).
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074090;
01-NOV-1996
01-NOV-1996
01-DEC-2001
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                                                                                                                                                                            "HIV-1 subtypes among blood Submitted (NOV-1997) to the EMBL; AF034037; AAC79289.1; InterPro: IPR000328; Env_GP4
                                                                                                                                                                                                                                                                                                                                                                             Human immunodeficiency virus type Viruses; Retroid viruses; Retrovir NCBI_TaxID=11676;
                                                                                SEQUENCE
                                                                                                                                         Transmembrane.
                                                                                                                                                         Pfam; PF00517; GP41; 1.
                                                                                                                                                                                                                                                                              Tanuri A., Swanson
Costa L.J., Telles
                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN-RJ96BRP004;
                                                                                                                                                                                                                                                                                                                                                                                                                                            ENV
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InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=PM213;
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NCBI_TaxID=11676;
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SEQUENCE 856 AA; 97396 MW; FE3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (JUN-1996)
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35; Conserv
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                                                                             122 AA;
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    Conservative
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J.G.,
                                                                                                                                                                      Env_GP41.
                                                                             14702 MW;
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97.2%;
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Brindeiro R.,
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Retroviridae; Lentivirus
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Score 189; DB Pred. No. 1.1e 2; Mismatches
                                                                                                                                                                                                                       EMBL/GenBank/DDBJ databases
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FE3E784C423C108C CRC64;
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Mismatches 1
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                                                                                                                                                                                                                                                                              Berro O.J., Savedra A.,
, Schable C., Pieniazek D.,
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  DB 15;
L.le-15;
les 0;
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01-NOV-1996
01-NOV-1996
01-DEC-2001
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SEQUENCE FROM N.A.
Buckler C.E., Buckler-White A.J., Willey R.L., MCCOy U.,
G"hmifted (JUL-1989) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                   [1]
SEQUENCE FROM N.A.
MEDLINE=86281827; PubMed=3016298;
Gendelman H.E., Koenig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (JUL-1994) to tl
EMBL; U12053; AAA76685.1;
EMBL; U12036; AAA76671.1;
                            SEQUENCE
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                                                                                                        gp41 resultis in loss of killing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infected with HIV type 1 (HTLV type IIIB)."; AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                         MEDLINE=92219406;
Dai L.C., Littaua
                                                                                                                                                                                                                                         molecular
                                                                                                                                                                                                                                                "Production of acquired
retrovirus in human and
                                                                                                                                                                                                                                                                                                           viruses; Retroid viruses;
NCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae;
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                                                            InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                               EMBL; M19921; AAA44992
                                                                                                     EQUENCE FROM N.A.

IEDLINE-92219406; PubMed=1373204;

IEDLINE-92219406; PubMed=1373204;

Takahashi K.,

Pai L.C., Littaua R., Takahashi K.,

Mutation of human immunodeficiency

Mutation of human immunodeficiency

Mutation of human immunodeficiency
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                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Transmembrane
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InterPro; IPR000777; GP120.
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nes 35; Conserv
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                                   PF00516; GP120;
PF00517; GP41; 1
Coat protein; Gl
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 Similarity
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                                                                                                                                                                                                                                          clone."
                                                                                      66:3151-3154(1992).
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                          Glycoprotein; Polyprotein; Transmembrane 97124 MW; ABA0AlBF36D5595A CRC64;
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97.2%;
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 191;
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virus type 1 at amino acid 585
CD8+ A24-restricted cytotoxic T
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          Length 854;
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AIDS;
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SEQUENCE FROM N.A. MEDLINE=99098984;
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CONFLICT
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Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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Viruses; Retroid viruses; NCBI_TaxID=57667;
                               Simian-Human immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Salminen M.O., Koch C., Sanders-Buell E., Ehrenberg P.K.,
Michael N.L., Carr J.K., Burke D.S., McCutchan F.E.;
"Recovery of virtually full-length HIV-1 provirus of diverse subtypes
                                                          Envelope glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=86281827; PubMed=3016298; Adachi A., Gendelman H.E., Koenig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=NL4-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=96036482; PubMed=7483282;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          molecular clone."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          retrovirus in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Production of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Martin M.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Virology 213:80-86(1995).
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Pro; IPR000328; Env_GP41.
Pro; IPR000777; GP120.
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214 H -> L (IN REF. 2).
530 A -> S (IN REF. 2).
739 G -> D (IN REF. 2).
97005 MW; FF2264B3841D1220 CRC64;
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SEQUENCE FRO
STRAIN=LW852
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                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
RCBI_TaxID=11676;
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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InterPro; IPR000777; GP120.
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                                                                                                                                                                                                         Mulder K.E.;
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                                                                                                                                                                                                                                                                                                                                     STRAIN-LW87-2;
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                                                                                                                                                                                                                                                                                                                                                                                                                        Envelope glycoprotein (Fragment).
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InterPro; IPR000777; GP120.
Pfam; PF005516; GP120; 1.
Pfam; PF00517; GP41; 1.
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J.,
Shaw G., Kong L., Weiss S., Watters D., Gallo R., Blatt
"Viral variability and serum antibody response in a la
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                            SEQUENCE
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                                          Similarity
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Pred. No. 4
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Q78243;
Q1-NOV-1996
STRAIN=LW90-2;
MEDLINE=95127297; PubMed=7826699;
MEDLINE=95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner V "Viral variability and serum antibody response in a laborat
                                                                                                                                                                                           Q89797
Q89797;
                                                                                       Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                    Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.

MEDLINE=89352106; PubMed=2765297;
Federico M., Titti F., Butto S., Orecchia A.,
Federico M., Wangiano N., Verani P., Rossi G.;
Macchi B., Mangiano N., Verani P., Rossi G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Verani P., Rossi G.B.; "Sequence analysis of HIV-1 proviral DNA from chronically infected HUT-78 cellular clone.";
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"Variability of HIV-1 virus:
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InterPro; IPR000777; GP120.
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NCE 851 AA; 96630 MW; 1A3767B9B7E98027
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F., Federic M.,
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1., Saggio I., Verani P., Rossi G.;
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01-NOV-1996
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Mulder K.E.; Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases EMBL; U12032; AAA76668.1; -.
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InterPro; IPR000377; GP120.
Pfam; PF00516; GP120; 1
Pfam; PF00517; GP41; 1.
AIDS: Coat protein; G71
NON_TER 747 747
NON_TER 747 AA; 84250 MW; 732E836A52245F14 CRC64;
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Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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01-DEC-2001 (TrEMBLrel 19, Last
Envelope glycoprotein (Fragment).
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                                                                                  MEDLINE-95127297; PubMed-7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger J.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blatt
"Viral variability and serum antibody response in a la
infected with HIV type 1 (HTLV type IIIB).";
ALDS Res. Hum. Retroviruses 10:1143-1155(1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=LW87-1;
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                                                                                                                                                                                                  Viruses; Retroid
NCBI_TaxID=11676;
                                                                                                                                                                                                                                              ENV
                                               STRAIN=LW881;
                                                              SEQUENCE FROM
                                                                                                                                                                  STRAIN-LW881
                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                               Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                      Envelope glycoprotein (Fragment).
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                                                                                                                                                                                                                                                                                                                                                                                        633
                                                                                                                                                                                                                                                                                                                                                                                                             1 YTGLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
                                                                                                                                                                                                                                                                                                                                                                                      YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF 668
                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
35; Conserv
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                                                                                                                                                                                                                   viruses;
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19,
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Last annotation update)
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Pred: No. '
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                                                                                                            Blattner W
n a laborato
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                                                                                                             laboratory worker
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RESULT: 5
Q70605
ID Q706
AC Q706
AC Q706
DT 01-N
DT 01-N
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DE Enve
GN ENV.
OX NCBI
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Best Local S
Matches 35
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Best Local S
Matches 35
                                                     Q70605
Q70605;
Q1-NOV-1996
Q1-NOV-1996
Q1-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q70604;
Q70604;
01-NOV-1996
01-NOV-1996
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AIDS; Coat protein; Glycoprotein; Polyprotein; NON_TER 748 748 SEQUENCE 748 AA; 84224 MW; 56BEDF186C67694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00516; GP120; 1
Pfam; PF00517; GP41; 1.
                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-95127297; PubMed-7826699;
Reitz M., Hall L., Robert-Guroff M., Lautenberger
Shaw G., Kong L., Weiss S., Waters D., Gallo R., B
"Viral variability and serum antibody response in
infected with HIV type 1 (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Viruses; Retroid
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENV
Viruses; Retroid
NCBI_TaxID=11676;
                    Human immunodeficiency virus
                                          Envelope
                                                                                                                                                                                                                                                                             Pfam; PF00516; GP120; 1
Pfam; PF00517; GP41; 1.
                                                                                                                                                                                                                                                                                                                         Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases EMBL; U12030; AAA76666.1; -.
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                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                       NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                     AIDS;
                                                                                                                                                                                                                                                                                                   InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                               Mulder K.E.;
                                                                                                                                                                                                                                                                                                                                                           STRAIN=LW851;
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                                                                                                                                                         638
                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM
                                                                                                                                                     YTGLIHSLIEESQNQOEKNEQELLELDKWASLWNWF 36
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                                                                                                                                                                                                                                                        Coat protein; Glycoprotein; Polyprotein; Transmembrane BR 752 752
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35; Conser
                                                                                                                                                                                                 Similarity 97.3
35; Conservative
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                                          glycoprotein
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IPR000777; GP120.
                                                    6 (TrEMBLrel. 01, 6 (TrEMBLrel. 01, 1 (TrEMBLrel. 19,
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                                                                                                  PRELIMINARY;
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           viruses;
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97.2%;
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97.2%;
                                            (Fragment).
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01,
           Retroviridae;
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Last annotation update)
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0; Mismatches
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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                 I number of hits satisfying chosen parameters:
                                                                                                                                                                                                          SPTREMBL_21:*
1: sp_archea:*
2: sp_bacteria
3: sp_fungi:*
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6:
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10:
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                                                                                                                                                                                                                                                                                                                                                                                                              671580 seqs, 206047115 residues
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Gapop 10.0 , Gapext 0.5
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197
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sp_vertebrate:*
sp_unclassified:*
sp_rvirus:*
sp_bacteriap:*
sp_archeap:*
                                                                                                                                                                                                                      sp_archea:*
sp_bacteria:*
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sp_rodent:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

16.	1 25	14	13	12	11	10	9	8	7	6	5	4	ω	2	–	Result
188	189	189	191	191	191	191	191	191	191	191	191	191	191	191	191	Score
95.4	95.9	95.9	97.0	97.0	97.0	97.0	97.0			97.0	97.0	97.0	97.0	97.0	97.0	Query Match
122	122	122	856	856	856	854	854	852	851	752	752	752	748	747	645	Length
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Q9YXR2	Q9QIW0	Q9YXR6	Q74090	Q74599	092877	Q72502	Q85582	Q89797	Q78243	Q70608	Q70605	Q70604	Q70606	Q70607	Q993A6	ID
human	Q9qiw0 human immun	Q9yxr6 human immun	Q74090 human immun	Q74599 human immun	092877 simian-huma		Q85582 human immun	human	human	human	5 human i	Q70604 human immun	Q70606 human immun	Q70607 human immun	Q993a6 human immun	Description

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185	185	185	185	186	186	186	186	186	186	186	186	186	186	186	186	187	187	187	188	188	188	188	188	188	188	188	188	188
				94.4					-			-			-			94.9			٠							95.4
129	127	122	122	861	856	854	852	852	837	837	789	727	123	122	122	854	854	851	859	855	854	847	843	357	122	122	122	122
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Q9YYZ5	Q9YYX0	9NLI60	Q9QIV1	056109	Q90SM7	056566	Q73303	092761	Q9QKJ5	Q9QKJ6	Q9QKJ4	Q9QKJ3	Q9EAA3	Q9IJN5	Q9YXP1	Q78705	090178	Q994B6	Q97013	Q8Q367	040222	966690	Q70008	Q78119	Q9IJP2	Q9IJQ3	Q9IJR0	Q9YXP0
Q9yyz5 humar	Q9yyx0 human	Q9ijn6 human	Q9qiv1 human	O56109 human	Q90sm7 human	O56566 human	Q73303 human	092761 human	Q9qkj5 human	Q9qkj6 human	Q9qkj4 human	Q9qkj3 human	. Q9eaa3 human		Q9yxp1 human		O90178 human	Q994b6 humar	Q97013 human	Q8q367 human	O40222 human	Q69996 human	Q70008 human	Q78119 human	Q9ijp2 human	Q9ijq3 humar	Q9ijr0 humar	Q9yxp0 human
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ALIGNMENTS

RESULT 1 Q993A6 Q993A6 RESULT 1 Q993A6 RO (PRELIMINARY; PRT; 645 AA. AC (P993A6) DT 01-JUN-2001 (TTEMBLICE1. 17, Created) DT 01-JUN-2001 (TTEMBLICE1. 17), Last sequence update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DT 01-DUN-2001 (TTEMBLICE1. 19) Last annotation update) DE Truncated envelope glycoprotein (Fragment). ON VICES 100 (TTEMBLICEN 11
1933A6 PRELIMINARY; PRT; 645 AA. 1-JUN-2001 (TrEMBLrel. 17, Created) 1-JUN-2001 (TrEMBLrel. 17), Last sequence update) 1-JUN-2001 (TrEMBLrel. 19), Last sequence update) 1-JUN-2001 (Tremble. 19), Last sequence up

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Result
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length: 2000000000
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1: /SIDS2/gcgdata/g
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179
1 LIHSLIEESQNQQEKNI
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1996.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1998.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1998.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1998.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1985.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1987.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                  /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2000.
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2001
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002
                                                                                                                                                                                                                                               Length
DВ
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                AAR64395
AAB52685
AAB52819
AAB14668
AAY88710
AAY89390
ABB00069
ABB000635
ABB000635
ABB01534
                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                          distribution
         DP-178 homologue 6
T20/Dp178 peptide
T716 peptide fragm
HIV-1 isolate LAI
Core polypeptide f
Core polypeptide f
Viral Dp178/107-1i
Viral Dp178/107-1i
Viral Dp178/107-1i
                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                                                                                             to have
being pr
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	AAY22912	19	36	•	179
-1 derived	AAW17011	18	36		179
8 correspon	AAR98398	17	36		179
erived f	AAR64364	16	36		179
i-HIV peptide	AAB54934	22	35		179
e polypeptide	AAB77789	22	35		179
re polyp	AAB77629	22	35		179
178-like/DP107-	AAU13342	22	35		179
78-liké/DP107-	AAU13182	22	35		179
al core polype	ABB02272	22	35		179
al core poly	ABB02111	22	35	100.0	179
1 DP178/107-1	ABB00796	22	35		179
al DP178/107-1	ABB00634	22	35	•	179
e polypepti	AAY89388	21	35		179
V-1 isol	AAB14670	21	35	•	179
/DP178 peptid	AAB52687	21	35		179
178 homolo	AAR64397	16	35		179
HIV peptide	AAB54933	22	34		179
polypeptide	AAB77790	22	34		179
78-	AAU13343	22	34		179
l core polype	ABB02273	22	34		179
al DP178/107-1	ABB00797	22	34		179
e polypeptide	AAY89389	21	34	100.0	179
-1 isol	AAB14669	21	34		179
/DP178 pepťide	AAB52686	21	34		179
-178 homologu	AAR64396	16	34		179
i-HIV peptide	AAB54932	22	ω ω		179
р [AAB77791	22	33	•	179
polypeptide	AAB77630	22	33		179
re polypeptid	AAB77065	22	33		179
8-like/DP107-	AAU13344	22	33		179
-like/DP107-	AAU13183	22	33		179
8-like/dP107-	AAU12618	22	33	100.0	179
ral core polype	ABB02274	22	33	00.	179
Viral core polypep	ABB02112	22	33	00.	179

ALIGNMENTS

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XPXX
                                                                                     AAR64395
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1
                                                                                                                                                                                                                                   antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI;
human immunodeficiency virus; transmembrane protein; gp41;
alpha helix; leucine zipper; DP-185.
 07-JUN-1993;
                       07-JUN-1994;
                                                                                                                                                                                                                                                                                                                                        AAR64395
                                                                                                                       Modified-site
                                                                                                                                                                                                                                                                                    DP-178 homologue 64 derived from HIV-1 has antiviral activity.
                                                                                                                                                                                                                                                                                                              25-AUG-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                               AAR64395 standard; Peptide; 33 AA
                                                22-DEC-1994.
                                                                       WO9428920-A.
                                                                                                                                                                           Modified-site
                                                                                                                                                                                                              Synthetic
93US-0073028
                        94WO-US05739
                                                                                                                        33
                                                                                                           /note=
                                                                                                                                                            /note=
                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                  "optionally has an amino, acetyl, 9-fluorenylmethoxy-carbonyl, hydrophobic or macromolecular carrier gp. attached"
                                                                                             "optionally has a carboxyl, amido, hydrophobic or macromolecular carrier gp. attached" \,
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core

polyper

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RESULT 2
AAB52685
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Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Computer search generated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HIV transmission
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The present
helical segr
                                                                    Claim 12;
                                                                                                                          Administration of peptide agents with a sequence corresponding partial-length T20/DP108 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                               WPI;
                                                                                                                                                                                                                                                           Wang
                                                                                                                                                                                                                                                                                                                                                        05-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                      05-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200066622-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemoattractant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antiinflammatory; T20/DP178; gp41 ectodomain; HIV-1 fusion; formyl peptide receptor family; FPR; inflammatory response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T20/DP178 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB52685 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  specific diagnostic tools
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR64365-97 are peptide derivs. of DP-178 (AAR64364) which have be truncated at the amino terminus. DP-178 corresponds to amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Barney SO,
Petteway SR,
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                                                                                                                                                                                                                                                                                                       (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                                                               2000-656493/63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                    Page 25; 148pp; English.
                                                                                                                                                                                                                                                         Oppenheim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page. 133;
                                                                                                           is
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ment of th
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, Wild CT
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                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US12371.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                        99US-0132686.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fragment #63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CT;
  the
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                                                                                                                                                                                                                                                             JJ,
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                        18
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                                                                                                                     modulate
  s a peptide
ectodomain
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Pred. No. 1
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                                                                                                                     inflammation
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                                                                                                                                                                                                                                                           Gong W,
of HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptides
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                                                                                                                                                                                                                                                             Gao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 16;
1.6e-15;
es 0;
of T20/DP178. protein gp41.
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                                                                                                                                                                                                                                                           Murphy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              response up-regulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
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  T20/DP178
T20/DP178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33;
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RESULT 3
AAB52819
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PR
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SO
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        The present invention relates to peptide fragments of T20/DP178 and T21/DP107 (see AAB52623-B52818 and AAB52823-B52824). T20/DP178 and T21/DP107 are helical segments of the ectodomain of HIV-1 protein gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/DP178 and T21/DP107 interact with members of the formyl peptide receptor (FPR) family and thereby up-regulate an inflammatory response, and act as potent chemoattractants and activators of human peripheral blood phagocytes (but not T cells). The peptides of the present invention can be used to modulate an inflammatory response in a subject. The present sequence is a peptide isolated in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   located in the carboxyl terminus of the gp41 ectodomain. gp41 plays a critical role in the fusion of HIV-1 and host cell membranes. T20/Dp178 interacts with members of the formyl peptide receptor (FPR) family and thereby up-regulates an inflammatory response, and acts as a potent chemoattractant and activator of human peripheral blood phagocytes (but not T cells). The present peptide can be used to modulate an
                                                                                                                                                                                                                 Administration of peptide agents with a sequence corresponding partial-length T20/DP178 or T21/DP107 formyl peptide receptor antagonist is used to modulate inflammation -
                                                                                                                                                                                                                                                                                                        Wang JM,
                                                                                                                                                                                                                                                                                                                                                                         05-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                     09-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chemoattractant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antiinflammatory; T20/DI formyl peptide receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T716 peptide fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB52819;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB52819 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                   Example 1;
                                                                                                                                                                                                                                                                            WPI; 2000-656493/63
                                                                                                                                                                                                                                                                                                                                       (USSH)
                                                                                                                                                                                                                                                                                                                                                                                                      05-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200066622-A1
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invention
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33; Conservative
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                                                                                                                                                                                                                                                                                                           Oppenheim JJ,
                                                                                                                                                                                   Page 40; 148pp;
                                                                                                                                                                                                                                                                                                                                          DEPT
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                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US12371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                       99US-0132686
                                                                                                                                                                                                                                                                                                                                          HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T20/DP178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                            & HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              p178; gp41 ectodomain; HIV-1 fusion; T21/DP107;
family; FPR; inflammatory response up-regulation;
                                                                                                                                                                                                                                                                                                           Su S,
                                                                                                                                                                                     English.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                            SERVICES
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                                                                                                                                                                                                                                                                                                           Gong W,
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                                                                                                                                                                                                                                                                                                           Gao J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 21;
.6e-15;
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                                                                                                                                                                                                                                                                                                           Murphy
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Query Match Best Local Similarity Matches 33; Conserv

100.0%; ilarity 100.0%; Conservative

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Score 179; DB 21; Pred. No. 1.6e-15;

Length Indels Sequence

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                                                                                                                                                                                                                                                                                           from the C-helical domain of the gp41 envelope glycoprotein from HIV-1 group M, subtype B, isolate LAI. The invention relates to ra a neutralising antibody response to a broad spectrum of HIV (human
                                                                                                                                                                                                                                                                                                                                                                                        Raising neutralizing antibody response to human immunodeficiency virus, comprises administering a polypeptide capable of forming a stable coiled-coil solution structure -
                                                                                                                                                                                                                                                                                                                                  Sequences AAB14604-B14606 and AAB14607-B14670 represent peptides derived
                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 33; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-465959/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wild CT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JAN-1999; 99US-0115404.
07-JAN-2000; 2000US-0480336.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gp41 transmembrane-proximal amphipathic alpha-helical segment; core 6-helix bundle; viral entry inhibition; immunogenic; anti-HIV; antibody; humoral response; broad spectrum vaccine; anti-HIV; envelope glycoprotein; prophylaxis; therapy; group M; subtype B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV-1 isolate LAI gp41 C-helical domain peptide P-18, fragment #62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24 - NOV - 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB14668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB14668 standard; peptide; 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-JAN-2000; 2000WO-US00456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV-1; gp41 C-helical domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (WILD/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) WILD C T.
) WEISS C D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Weiss CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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cc immunodeficiency virus) strains and isolates, comprising the administration of a peptide which corresponds to or minics highly cc conserved portions of gp41 which are important in mediating the corresponds to or minic the correspond ct to or minic the coiled coil solution structure of the N-helical domain (the transmembrane-proximal amphipathic alpha-helical segment), cc correspond or minic the C-helical correspond or the gp41 core 6-helix bundle, which is formed by the interaction correspond or or the gp41 core 6-helix bundle, which is formed by the interaction correspond or or the gp41 core 6-helix bundle, which is formed by the interaction correspond or or the gp41 core 6-helix bundle, which is formed by the interaction correspond or the gp41 core formal combination (particularly can be administered either singly or as a combination (particularly can be combination of N-helical and C-helical domain peptides can be combination of N-helical and C-helical domain peptides can be calternately linked together to form a peptide which minics the core calternately linked together to form a peptide which minics the core combination of N-helical forministration of the peptides) generates a humoral compose, with the production of antibodies against gp41 structures convolved in viral entry. As these portions of gp41 are well conserved, convolved in viral entry. As these portions and be administered as a composition shift the ability of HIV to infect uninfected calls. A composition convolved contribution and the peptide composition in the administered as a combination of the peptide composition and the same antibodies which reduce contribute to ability of HIV to infect uninfected calls. A composition convolved contributed co
        comprising polyclonal or monoclonal antibodies can be administered to reduce HIV infection of uninfected cells. Antibodies raised against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to raising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
AAY88710
                                                                                                                                                                  DR XX
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                                     Query Match
Best Local Similarity
        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can function as the core polypeptide that may be introduced into a living system and that can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  function as a pharmacoligically useful peptide for the treatment or prevention of a disease. The core polypeptides are bloactive peptides selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor, cytokine, differentiation factor, selected from a growth factor for the factor factor factor for the factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor factor f
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                                                                                                                                                                                                                                                                          anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends
                                                                                                                                                                                                                                                                                                                                                         inhibiting viral infection and can be used in anti-viral and anti-fusogenic treatments. Sequences AAY88651-Y90055 represents.
                                                                                                                                                                                                                                                                                                                                                                                                                                        interleukin, interferon, colony stimulating factor, hormone or anglogenic factor. The peptides of the invention can be used fi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 22; 124pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A new hybrid polypeptide with enhanced pharmacokinetic properties comprises enhancer sequence -
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les 33; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                             form
                                                                                                                                                                                                                                         hybrid polypeptides.
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                                     Score 179; DB 21;
Pred. No. 1.6e-15;
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Pred. No. 1.6e-15;
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d form
                                                                                                                                                                                                                                                                                                                 polypeptide that they are linked to. The core polypeptides are any polypeptide that may be introduced into a living system and that can polypeptide that may be introduced into a living system and that can function as a pharmacollyjically useful peptide for the treatment or prevention of a disease. The core polypeptides are bloactive peptides selected from a growth factor, cytokine, differentiation factor, interferon, colony stimulating factor, hormone or angiogenic factor. The peptides of the invention can be used for inhibiting viral infection and can be used in anti-viral and inhibiting viral infection and can be used in anti-viral and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Retrovirus; hybrid polypeptide; enhancer; gp41; envelope protein; HIV-1; HIV-2; SIV; pharmacokinetic; half-life; growth factor; cytokine; viral; anti-fusogenic; differentiation factor; interleukin; interferon; colony stimulating factor; hormone; anglogenic factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to hybrid polypeptides comprising enhancer peptide sequence linked to core polypeptides. The enhancer polypeptides are derived from various retroviral envelope (gp41) protein sequences, especially from HIV-1, HIV-2 and SIV. The enhancer peptides enhance the pharmacokinetic properties such as increasing the half-life of any core polypeptide that they are linked to. The core polypeptides are any
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                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                 anti-fusogenic treatments. Sequences AAY88651-Y90055 represent core polypeptide fragments that can be used in the invention. Some sequences among those indicated also comprise enhancer fragments at terminal ends and form hybrid polypeptides.
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                                                                               1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
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ABB00069 standard; Peptide; 33 AA.

Human immunodeficiency virus; HIV; respiratory syncytial virus; RSV;

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                                                                                                                       ABB00635 standard; Peptide;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Heptad repeat region peptide analogs useful for fusion, useful for treating HIV and Respiratory
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Pred. No. 1.6e-15;
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Best Local Similarity 100.0%;
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WPI; 2001-514829/56
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                                        Antczak JB,
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                   The invention relates to isolated analogues of the heptad repeat region peptides DP178 and DP107. DP178 and DP107 correspond to amino acids 638-673 (heptad repeat region HR2) and 558-595 (heptad repeat region HR1) respectively, of HIV-1LAI transmembrane protein gp41. The HR1 and HR2 regions of proteins interact non-covalently with each other and/or with peptides derived from them. This interaction is required fo
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                                                        Sequence
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Best Local
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                                                                                                                                   Sequence
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 1
                                1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
                                                                    l Similarity
33; Conserv
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                                                                                Score 179;
Pred. No. 1
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RESULT 14
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                                                                                                                                                                          Sequence
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                   1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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Search completed: May 16, 2003, 11:12:04 Job time: 30.753 secs

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2003, 11:04:54; Search time 11.1325 Seconds (without alignments) 284.970 Million cell updates/sec

Title: Perfect score: US-09-623-533A-119 179 1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33

Sequence:

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

earched: I number of hits satisfying chosen parameters: 283224 segs, 96134422 residues

283224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

pIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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RESULT 3 VCLJH3

ALIGNMENTS

Qy 1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33	Query Match 100.0%; Score 179; DB 2; Length 854; Best Local Similarity 100.0%; Pred. No. 1e-13; Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	RESULT 2 S13288 env protein - human immunodeficiency virus type 1 C.\$pecies: human immunodeficiency virus type 1, HIV-1 C.\$pecies: human immunodeficiency virus type 1 C.\$pecies	OY 1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33 Db 636 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 668	Query Match 100.0%; Score 179; DB 2; Length 851; Best Local Similarity 100.0%; Pred. No. 1e-13; Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	RESULT 1 \$33985 env polyprotein - human immunodeficiency virus type 1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999 C;Accession: \$33987 #sequence_revision 19-Mar-1991 A;Reference number: \$33979 A;Reference number: \$33979 A;Accession: \$33985 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-851 <ccar> A;Cross-references: EMBL: 211530; NID: 960192; PIDN: CAA77628.1; PID: 960199 C;Superfamily: type E retrovirus env polyprotein</ccar>	
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env polyprot
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S21994
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Cell 40, 9-17,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nberger, J.A.; Papas, T.S.; Ghrayeb, Nature 313, 277-284, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Superfamily: type E retrovirus env polyprotein
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodefi
F;1-30/Domain: signal sequence #status predicted <SIG>
F;31-516/Product: exterior membrane glycoprotein #status predicted <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Title: Nucleotide sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Date: 17-May-1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N; Alternate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      env polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R; Ratner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Accession: A03973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
Mesidues: 1-861 <WAI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Accession: A03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Gene: env
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Accession: A0397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Species: human immunodeficiency virus type 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Species: human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Reference number:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Molecule type: DNA
Residues: 1-856 <RAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Accession: A0397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Keywords: AIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . 30/Domain: signal sequence #status predicted <SIG>
1-511/Product: exterior membrane glycoprotein #status predicted <EXT>
1-5186/Product: exterior membrane glycoprotein #status predicted <TMM>
1-586/Product: transmembrane glycoprotein #status predicted <TMM>
18,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,406
11,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent) #status predic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ross-references: GB:K02013; NID:g326417; PIDN:AAB59751.1; PID:g326424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyprotein precursor - human immunodeficiency virus
                                                                                                                                                                                             646 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
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   protein
s: human
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Similarity 100.0%;
33; Conservative 0
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DS; capsid protein; coat protein;
gp120/gp41 - human imm
immunodeficiency virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence of the AIDS virus, A90866; MUID:85099333; PMII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #sequence_revision 17-May-1985 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GB:M15654; GB:K02008; GB:K02009;
                                                                                                                                                                                                                                                                                                                                                          100.0%;
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                          Score 179; DB 1
Pred. No. 1e-13;
immunodeficiency
irus type 1, HIV-1
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                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PMID: 2981635
                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                     Length 861;
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Gallo, R.C.; W
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A; Molecule type: DNA
A; Residues: 1-357 <STE1>
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
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A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355; NID: 960179; PIDN: CAA43622.1;
A; Cross-references: EMBL: X61355;                                                           R;Burger, H.; Weiser, B.; Flaherty, K.; Gulla, J.;
Proc. Natl. Acad. Sci. U.S.A. 88, 11236-11240, 1991
A;Title: Evolution of human immunodeficiency virus
                                                                                                                                                                                                                                               N;Alternate names: coat polyprotein N;Contains: amino end of coat protein gr C;Species: human immunodeficiency virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Experimental source: patient 27L A; Note: submitted to the EMBL Data Library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-357 <ST2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Title: Distinct populations of human immunodeficiency A; Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          envelope protein gp120/gp41 - human immunodeficiency virus C;Species: human immunodeficiency virus type 1, HIV-1 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_ch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
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A; Residues: 1-140, 'X', 142-312, 'X', 314-357 <STE2>
A; Cross-references: EMBL: X61355; NID: g60179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Reference number: A; Accession: S70421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Title: Distinct populations of human immunodeficiency A; Reference number: S70417; MUID:92144209; PMID:1736940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Reference number: S21990
A;Accession: S21994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Accession: S21994; S70421
R;Steuler, H.; Storch-Hagenlocher,
submitted to the EMBL Data Library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Variety: isolate 27B
C; Date: 20-Feb-1995 #sequence_revision
                                                                                                                                                            C; Accession: C41621
                                                                                                                                                                                          C; Date: 11-Feb-1993 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                                           C41621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross references: EMBL:X61356; NID:g60181; PIDN:CAA43624.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: A; Accession: S70422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AIDS Res. Hum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession: S70422; S21996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Superfamily: type E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Status: preliminary
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                             A; Reference
                                                                                                                                                                                                                               A; Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Steuler, H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local
Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                       polyprotein P - human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
                                                                                                                                                                                                                           host Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LIYTLIEESQNQQEKNEQELLELDKWASLWNWF
                             number: A41621;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Retroviruses 8,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Storch-Hagenlocher, B.; Wildemann,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Retroviruses 8,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Storch-Hagenlocher, B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95.0%;
93.9%;
                                                                                                                                                                                                                           (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.0%;
                             MUID:92107924;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             her, B.; Wild
53-59, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       53-59, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      env polyprotein
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Pred.
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2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                       gp41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170;
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                                                                                                                                                                                          31-Dec-1993 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-Feb-1995 #text_change
                                                                                                                                                                                                                                                         type 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1991
                             cy virus type 1 nucleotide sequence diversi PMID:1763038
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e 1, HIV-1
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ω
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.7e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
.7e-13;
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                                                                                                                                                                                                                                                                                                                                                       type 1 (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                           Nguyen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 357;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                           P.N.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PID:g1067129
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                                                                                                                              Gibbs,
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R;Starcich, B.R.; Hahn, B.H.;
Cell 45, 637-648, 1986
A;Title: Identification and cl
A;Reference number: A24774; M
A;Accession: A24774
A;Molecule type: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-443 < SUR'>
A; Cross-references: GB:M77230; NID:g328631; PIDN:AAB03792.1; PID:g555015
A; Note: this virus was isolated from the mother's sexual partner
C; Genetics:
A; Gene: env
C; Superfamily: type E retrovirus env polyprotein
C; Superfamily: type E retrovirus env polyprotein; glycoprotein; immunodeficiency;
E; Syperduct: coat protein gp120 (fragment) #status predicted <GP1>
F; 1-251/Product: coat protein gp41 (fragment) #status predicted <GP2>
F; 424-443/Domain: transmembrane #status predicted <TMN>
F; 9.23, 36, 48, 78, 101, 107, 131, 137, 143, 147, 153, 188, 200, 203, 351, 356, 365, 377/Binding
A; Residues: 1-856 <:
A; Cross-references:
C; Genetics:
                                                                                                                                                                     N;Contains: coat protein gp120; coat protein gp41
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 30-Sep-1988 *sequence_revision 30-Sep-1988 *text_change C;Accession: A24774
R;Starcich, B.R.; Hahn, B.H.; Shaw, G.M.; McNeely, P.D.; Modrow,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            F;31-511/Product: exterior membrane glycoprotein #status predicted <EXT>
F;512-856/Product: transmembrane glycoprotein #status predicted <TMM>
F;88,136,141,156,160,186,197,230,234,241,262,276,289,295,301,332,339,356,386,392,397,40
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A; Reference number: A:
A; Accession: A03974
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Nature 313, 450-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Note: host Homo sapiens (man)
C; Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change 16-Jul-1999
C; Accession: A03974
R; Muesing, M.A.; Smith, D.H.; Cabradilla, C.D.; Benton, C.V.; Lasky, L.A.; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
VCLJVL
                                                                                                                                                                                                                                                                                 env polyprotein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;Superfamily: type E retrovirus env polyprotein;;Keywords: AIDS; capsid protein; coat protein; glycoprotein;;1-30/Domain: signal sequence #status predicted <SIG>
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       611,616,625,637,674,750,816/Binding site: carbohydrate (Asn) (covalent)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Species: human immunodeficiency virus type 1, HIV-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               uery Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                          641
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LIYNLIEESQNQQEKNEQELLELDKWASLWNWF 413
                                          1-856 <STA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          450-458, 1985
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                 precursor -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                    GB:K03455;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95.0%;
96.9%;
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93.9%;
                                                                                                       characterization of conserved and MUID:86218077; PMID:2423250
                                                                                                                                                                                                                                                                          human immunodeficiency virus type 1 (isolate WMJ1)
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                      GB:M38432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 170; Db 2,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 170;
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                    NID:g1906382
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                                                                                                                                                                                                                                                                                                                                                                                        672
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2e-12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
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                                                                                                                           variable regions
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                                                                                                                                                                     Wolf,
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A;Cross-references: EMBL:X61359; NID:g60182; PIDN:CAA43630 R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency vii A;Reference number: S70417; MUID:92144209; PMID:1736940.
                                                                                                                                                                                                                                                                                                                             envelope protein gp120/gp41 - human immunodeficiency virus type 1 c;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 28 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 01-Dec-2000 C;Accession: S21998; S70425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Gene: env
C;Superfamily: type E retrovirus env polyprotein
C;Keywords: capsid protein; coat protein; glycoprotein; C;Keywords: capsid protein; coat protein; glycoprotein
F;1-29/Domain: signal sequence #status predicted <SIG>
F;30-861/Product: env polyprotein #status predicted <EPP:
F;87,129,135,140,143,159,163,187,198,234,241,262,276,295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Superfamily: type E retrovirus env polyprotein; C;Keywords: coat protein; 91ycoprotein; polyprotein; transmeml F;1-29/Domain: signal sequence #status predicted <SIG> F;30-501/Product: coat protein 9p120 #status predicted <GP1> F;502-847/Product: coat protein 9p41 #status predicted <GP2> F;87,134,140,151,155,183,197,234,241,262,276,289,295,331,338,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Gurgo, C.; Guo, H.G.; Franchini, Virology 164, 531-536, 1988 A;Title: Envelope sequences of two A;Reference number: A28922; MUID:88
A; Molecule type: DNA
A; Residues: 1-222,'x',224-358
                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-358 <STE1>
                                                                                                                                                                                                                           A; Reference number: A; Accession: S21998
                                                                                                                                                                                                                                                                                       R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
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A; Residues: 1-861
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                                                         A; Accession: S70425
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                                        Status: preliminary
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Best Local :
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93.9%;
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93.9%;
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  <STE2>
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of HIV-1 in
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l.2e-12;
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                                                                                                    type 1 in blood
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EMBL: X61359;

NID:g60182;

PIDN:CAA43630.1;

PID: g60183

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envelope protein gp120/gp41 - human immunodeficiency virus type C;Species: human immunodeficiency virus type 1, HIV-1 A;Variety: isolate 4B c;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change C;Accession: S22004; S70419
R;Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B.; submitted to the EMBL Data Library, July 1991 A;Description: Distinct populations of HIV-1 in blood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         env protein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
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Nature 348, 69-73
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                                                                                                                                                     RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                          Accession: S13289
                                                                                                                                                                                                                                                                                                                                                                                                                        Title: HIV-1 tropism for mononuclear phagocytes can be Reference number: $13288; MUID:91043044; PMID:2172833
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Best Local
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Molecule type: DNA
Residues: 1-847 <PAN>
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Residues: 1-847 <OBR>
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93.8%;
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93.8%;
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Library, July 1996
                                                                                                                                                                                                                                                                                        Score 166;
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pred. No. 1.1e-12;
rematches 0;
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Pred. No. 3.7e-12;
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                                                                                                                                                                                                                                                                                                        DB 2;
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Search completed: May 16, Job time: 11.1325 secs

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A; Gene: env
C; Superfamily: typ
C; Keywords: AIDS;
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C;Superfamily: type E retrovirus env polyprotein; immunodeficiency; polyp
C;Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodeficiency; polyp
F;1-30/Domain: signal sequence #status predicted <SIG>
F;31-509/Product: exterior membrane glycoprotein #status predicted <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-855 <SAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Note: host Homo sapiens (man)
C;Date: 17-May-1985 #sequence_revision 17-May-1985 #text_change
C;Accession: A03976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R:Steuler, H.; Storch-Hagenlocher, B.; Wildemann, B. AIDS Res. Hum. Retroviruses 8, 53-59, 1992 A;Title: Distinct populations of human immunodeficiency A;Reference number: S70417; MUID:92144209; PMID:1736940
    В
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C;Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Sanchez-Pescador, R.; Power, M.D.; Barr, P.J.; Steimer, Science 227, 484-492, 1985
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A; Residues: 1-292, 'X', 294-357 <STE2>
A; Cross-references: EMBL: X61353; NID: g60188
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-357 <STE1>
                                                                                                                                                                        F;610,624,636,815/Binding site: carbohydrate (Asn) (covalent)
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NCBI_TaxID=11678;
                               "Assignment of intrachain disulfide bonds and characterization potential glycosylation sites of the type 1 recombinant human immunodeficiency virus envelope glycoprotein (gp120) expressed Chinese hamster ovary cells.";
J. Biol. Chem. 265:10373-10382(1990).
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MEDLINE=87299196; PubMed=3040055;
Ratner L., Fisher A., Jagodzinski
Gallo R.C., Wong-Staal F.;
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NCBI_TaxID=11706;
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Crowl R., Ganguly K., Gordon M., Conroy R.,
Shaw G. M., Wong-Staal F., Reddy E.P.;
"HTLV-III env gene products synthesized in
antibodies present in the sera of AIDS pati.
Cell 41:979-986(1985).
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01-FEB-1996 (Rel.
15-JUL-1999 (Rel.
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                                                                                                                                                           SEQUENCE FROM N.A MEDLINE=95127297;
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21-JUL-1996 (Rel. 01, L
15-JUL-1999 (Rel. 38, L
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HIV; K02013; ENV$BRU
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MEDLINE-85099333; PubMed=2981635;
Main-Hobson S., Sonigo P., Danos
"Nucleotide sequence of the AIDS
Cell 40:9-17(1985).
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15-JUL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
9lycoprotein (GP120); Transmembrane glycoprotein
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P19551;
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MEDLINE=90317877; PubMed=1695254;
MEDLINE=90317877; A., Lamoni
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Viruses; Retroid viruses;
NCBI_TaxID=11704;
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PF00517; GP41;
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IPR000777; GP120.
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es; Retroviridae;
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RESULT 8
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P19550;
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the European Bioinformatics Institutions as long
modified and this statement is not removed.
                                                                                                                                                                                                                                                                                           MEDLINE=90347835; PubMed=2384920;
Cheng-Mayer C., Quiroga M., Tung J.W., Dina D., Levy J.;
"Viral determinants of human immunodeficiency virus type
macrophage tropism, cytopathogenicity, and CD4 antigen mo
J. Virol. 64:4390-4398(1990).
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between the Swiss Institute of Bioinformatics and the EMBL
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01-FEB-1991 (Rel. 17, Last sequence update)
15-7UL-1999 (Rel. 38, Last annotation update)
Envelope polyprotein GP160 precursor [Contains: Exterior membrane
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NCBI_TaxID=11691;
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21-JUL-1986 (Rel. 01, Last sequence up
15-JUL-1999 (Rel. 38, Last annotation
Envelope polyprotein GP160 precursor [
glycoprotein (GP120); Transmembrane gl
                                                                    PIR;
HIV;
                                                                                                            EMBL; K02083;
EMBL; X01762;
                                                                                                                                                                                                                    use by non-profit institutions as long modified and this statement is not removed
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SEQUENCE FROM N.A.
MEDLINE=85111157; PubMed=2982104;
MEDLINE=85111157; Mar. Smith D.H., Cabradi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus type 1 (PV2 Viruses; Retroid viruses; Retroviridae; NCBI_TaxID=11700;
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                                                                                                                                                                          entities requires a license agreement or send an email to license@isb-sib.ch
                                                                                                                                                                                                                                                                                                                                                AIDS/lymphadenopathy retrovirus.";
Nature 313:450-458(1985).
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3; A03974; VCLJVL.
// K02083; ENV$FV22.
terPro; IPR000328; Env_GP41.
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-i- MISCELLANEOUS: THE SC ISOLATE W 1984 IN SOUTHERN CALIFORNIA.
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Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D.,
Parks E.S., Parks W.P., Josephs S.F., Gallo R.C., V
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P19549;
01-FEB-1991
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MEDLINE-90317906; PubMed-2370688;

YORK-Higgins D. Cheng-Mayer C., Bauer D., Levy J.A., Din
"Human immunodeficiency virus type 1 cellular host range,
replication, and cycopathicity are linked to the envelope
the viral genome.";
J. Virol. 64:4016-4020(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam;
AIDS;
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modified and this statement is not removed.
entitles requires a license agreement (See l
or send an email to license@isb-sib.ch).
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InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Polyprotei
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01-FEB-1991 (Rel. 17, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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or send a
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Science 232:1548-1553(1986).
                                                                                                                                                      EMBL;
HIV; M
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                                                                                                                                                      M12507; AAB12990.1; -. M12507; ENV$WMJ2.
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X Sanchez-Pescador R., Power M.D., Bar Stemplen M.M., Brown-Shimer S.L., Ge Levy J.A., Dina D., Luciw P.A.;
"Nucleotide sequence and expression (ARV-2).";
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13-AUG-1987 (Rel. 05, Last sequence update)
13-AUG-1987 (Rel. 05, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor (Contains: Exterior membrane
glycoprotein (GP120); Transmembrane glycoprotein (GP41)].
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Interpro; IPR000777; GP120.
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Pfam; PF00517; GP41; 1.
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HIV; I
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Alizon M., Wain-Hobson S., Montagnier L., Sonigo P.
"Genetic variability of the AIDS virus; nucleotide
of two isolates from African patients.";
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Viruses; Retroid viruses; Ret
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1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Reitz M., Hall L., Robert-Guroff M., Lautenberge Shaw G., Kong L., Weiss S., Warten D., Gallo R., "Viral variability and serum antibody response infected with HIV type 1 (HTLV type IIIB).", AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human immunodeficiency virus type 1 Viruses; Retroid viruses; Retroviridae;
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Submitted (JUL-1994) to EMBL; U12032; AAA76668.1
                                   STRAIN-LW881;
                                                                  Reitz M., Hall L., Robert-Guroff M., Lautenberger Shaw G., Kong L., Weiss S., Waters D., Gallo R., E "Viral variability and serum antibody response in infected with HIV type 1 (HTLV type IIIB)."; AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                          STRAIN-LW881;
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InterPro; IPR000777; GP120.
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EMBL; U12034; AAA76669.
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Reitz M., Hall L., Robert-Guroff M., Lautenberger
Shaw G., Kong L., Weiss S., Waters D., Gallo R., B
"Viral variability and serum antibody response in
infected with HIV type I (HTLV type IIIB).";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
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NCBI_TaxID=11676;
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PF00517; GP41; 1.

Coat protein; Glycoprotein; Polyprotein; Transmembrane.

ER 748 748
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.;
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Reitz M., Hall L., Robert-Guroff M., Lautenberger J., Hahn B.,
Shaw G., Kong L., Weiss S., Waters D., Gallo R., Blattner W.;
"Viral variability and serum antibody response in a laboratory worker infected with HIV type 1 (HTLV type IIIB)";
AIDS Res. Hum. Retroviruses 10:1143-1155(1994).
                                                                                                                                                                                                                                                                                   Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases. EMBL; U12035; AAA76670.1; -
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viruses; Retroid
NCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae;
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation updat
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein; Transmembrane.
NON_TER 752 752
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SEQUENCE
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    LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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PF00517; GP41; 1.
Coat protein; Glyco
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33; Conservative (
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Pred. No. 9.9
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Pred. No. 9.9e-14;
; Mismatches 0;
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MEDLINE=95127297; PubMed=7826699;
Reitz M., Hall L., Robert-Guroff M.,
Shaw G., Kong L., Weiss S., Waters D
"Viral variability and serum antibod
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=89352106; PubMed=2765297; Federico M., Titti F., Butto S., Orecchia A., Macchi B., Mangiano N., Verani P., Rossi G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Carlini F., Federic M., Equestre M., Verani P., Rossi G.B.; "Sequence analysis of HIV-1 proviral chronically infected HUT-78 cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1996
01-DEC-2001
                                                                                              SEQUENCE FROM N.A.
STRAIN=LW90-2;
                                                                                                                                                             Viruses; Retroid
NCBI_TaxID=11676;
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EMBL; Z11530; CAA77628.1; -.
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InterPro; IPR000777; GP120.
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A., Saggio I., Verani P.,
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Pred. No. 1.1e-13;
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                                           Lautenberger J.,
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Q85582;
Q1-NOV-1996
Q1-NOV-1996
Q1-DEC-2001
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Submitted
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                                                               Pfam; PF00516; GP120; Pfam; PF00517; GP41; AIDS; Coat protein; G
                                                                                                                                                                                     gp41 resultis in loss of
lymphocytes.";
                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                          Buckler C.E.,
Submitted (JU)
                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                          "Production of acquired immretrovirus in human and nor molecular clone.";
J. Virol. 59:284-291(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE=86281827;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses; Retroid viruses; NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus type 1. Viruses; Retroid viruses; Retroviridae;
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Submitted (
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                                                                                                                                                   EMBL; M19921; AAA44992.1; -
                                                                                                                                                                                                 "Mutation of human immunodeficiency
"Mutation of human immunodeficiency
"Mutation of human immunodeficiency
                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Martin M.A.;
                                                                                                                InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                        MEDLINE-92219406;
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33; Conser
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                                                 protein;
854 AA;
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L-1989) to the
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man H.E., Koenig
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97124 MW; ABA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Koenig
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Pred. No. 1.1e-13;
 Score
Pred.
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                                                 in; Polyprotein; Transmembrane
ABA0A1BF36D5595A CRC64;
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Pfam; PF00517; GP41; 1.
AIDS; Coat protein; G1;
CONFLICT 214 214
CONFLICT 530 530
CONFLICT 739 739
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Q72502;
01-NOV-1996 (TrEMBLrel. 0
01-NOV-1996 (TrEMBLrel. 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=96036482; PubMed=7483282; Salminen M.O., Koch C., Sanders-Buell E., Ehrenberg P.K., Michael N.L., Carr J.K., Burke D.S., McCutchan F.E.; "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length" (Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length") (Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length") (Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length HIV-1 provirus of diverse "Recovery of virtually full-length") (Recovery of virtually full-length HIV-1 provirus of virtually full-length HIV-1 provirus of virtually full-length HIV-1 provirus of virtually full-length HIV-1 proviru
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092877;
                                                                Simian-Human immunodeficiency virus. Viruses; Retroid viruses; Retroviridae; NCBI_TaxID=57667;
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J. Virol. 59:284-291(1986).
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Viruses; Retroid viruses;
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SEQUENCE FROM N.A. MEDLINE=99098984;
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                                                                                                                                                                        Envelope
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33; Conserv
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IPR000777; GP120.
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                                                                                                                                                                                                                                                                                                  PRELIMINARY;
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PubMed=9882298;
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739
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es; Retroviridae; Lentivirus
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Pred. No. 1.1
0; Mismatches
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A -> S (IN REF. 2).
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1.1e-13;
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Cayabyab M., Karlsson G.B.,

Halloran M.,

, Etemad-Moghadam B.A., Hofn Fanton J.W., Axthelm M.K.,

Hofmann

Letvin N.L.,

Steenbeke

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Q74599;
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                                                                                                                                                                               Submitted (JUN-1996) to the EMBL/GenBank/DDBJ EMBL; D86088; BAA12995.1; INTERPRO, IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS: Coat protein; Glycoprotein; Polyprotein;
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"Spectrum of Biological Properties
(HIV-1) Isolates.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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"Changes in human immunodeficiency virus responsible for the pathogenicity of a muimmunodeficiency virus (SHIV-HXBc2).";
J. Virol. 73:976-984(1999).
                                                                                                                                                                SEQUENCE
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                                                                                                                                                                                                                                                                                                                              Iwatani Y.;
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l Similarity 100.0%;
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856 AA;
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                                                                                Conservative
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Pred. No. 1.1
); Mismatches
                                                                            Score 179; DB 15;
Pred. No. 1.1e-13;
Mismatches 0;
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O90178;
01-NOV-1998
01-NOV-1998
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Q74090;
01-NOV-1996
01-NOV-1996
01-DEC-2001
                 immunotoxin-resistant variant T cell line.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ
EMBL; AF070521; AAC28452.1;
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP41; 1.
AIDS; Coat protein; Glycoprotein; Polyprotein;
AIDS; Coat protein; Glycoprotein; Polyprotein;
                                                                                                                                                                                                              SEQUENCE FROM N.A.
Fang H., Pincus S.H.
                                                                                                                                                                                                                                                                                                     selected with immunotoxins
infected T cells.";
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EMBL: D86069; BAA13003.1; -
InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PF00516; GP120; 1.
Pfam; PF00517; GP120; 1.
Pfam; PF00517; GP41; 1.
ALDS; Coat protein; Glycoprotein; Polyprotein; Transmemb
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                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE=95074930; PubMed=7983770;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Envelope
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NCBI_TaxID=11676;
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                                                                                                                                                                                                                                                                                                                                             Tang H., Pincus S.H.;
"Unique insertion sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                   Spontaneous activation of human immunodeficiency virus mmunotoxin-resistant variant T cell line.";
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  protein;
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856 AA;
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B.E.;
Glycoprotein; 96885 MW; 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein; Polyprotein; Transmembrane. 97396 MW; FE3E784C423C108C CRC64;
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Retroviridae;
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Last annotation updat
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Pred. No. 1.1e-13;
; Mismatches 0;
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n; Polyprotein; 10808F3AED27С693В
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RM MEDILINE-96013015, PubMed-7474132;

RA Duensing T.D., Fang H., Dorward D.W., Pincus S.H.;

RT resistant cell lines chronically infected with human immunodeficiency rurus type 1.";

RT Virus type 1.";

RL J. Virol. 69:7122-7131(1995).

REMBL: L42371; AAA96326.1; -.

REMBL: L42371; AAA96326.1; -.

REMBL: L42371; AAA96326.1; -.

REMBL: L72371; AAA96326.1; -.

REMBL: L9300328; Env_GP41.

RINTETPRO: IPRO00777; GP120.

REMBL: PR00516; GP120; 1.

REMBL: PR00516; GP120; 1.

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Q78705;
Q1-NCV-1996 (TrEMBLrel. 01, Created)
Q1-NCV-1996 (TrEMBLrel. 01, Last sequence update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Envelope glycoprotein gp120.
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Viruses; Retroid viruses; Retroviridae; Lentivirus
CCBI_TaxID=11676;
Conservative
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Post-processing: Minimum Match 0%
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4: /cgn2_6/ptodata/1.
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103.919 Million cell updates/sec
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US-08-474-349A-416
US-09-315-304B-799
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71, Appli
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                                                                                                             INFORMATION FOR SEQ ID NO: 7
SEQUENCE CHARACTERISTICS:
LENGTH: 33 amino acids
TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-073-028-72
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US-08-484-223B-235
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US-08-554-616-72
                                                                                                                                              Sequence 72, Application US/08554616 Patent No. 6133418
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
                                                                              APPLICANT:
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ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ TANTO
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APPLICATION NUMBER: US,
FILING DATE: 07-JUN-19
                                                TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV TITLE OF INVENTION: TRANSMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 33 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
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TITLE OF INVENTION:
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Matthews, Thomas J.
Wild, Carl T.
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Langlois, Alphonse J
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Pennie & Edmonds
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MOLECULE TYPE: peptide
US-08-554-616-72
                                                                                                                   ; OTHER INFORMATION: Core polypeptide US-09-082-279B-61
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                                         Query Match
Best Local Similarity
Matches 33; Conserv
                                                                                                                                                                                                  SEQ ID NO 61
LENGTH: 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                  CURRENT FILING DATE: 1998-05-20 NUMBER OF SEQ ID NOS: 1515
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                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/082,279B
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                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
                                                                                                                                                     FEATURE:
                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                      TYPE: PRT
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LENGTH: 33 amino acids
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APPLICATION NUMBER: US 0
FILING DATE: 07-JUN-1993
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
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                  1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
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61, Application US/09082279B
5. 6258782
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Anwer, Mohmed
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                                                   Conservative
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SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                    7872-043
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                                                100.0%; Score 179; DB 4; 100.0%; Pred. No. 7.7e-16; tive 0; Mismatches 0;
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Pred. No. 7.7e-16
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LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33

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RESULT 7
US-08-474-349A-417
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 801
LENGTH: 33
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Best Local S
Matches 33
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Best Local
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CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
SOFTWARE: FastSEQ for Windows Version 3.0
EQ ID NO 639
LENGTH: 33
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
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TYPE: PRT
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                                                                                                                                                                                                                                           TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                      Local Similarity
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33; Conser
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Merutka, Gene
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Merutka, Gene
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                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                  7872-043
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                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 179; DB 4; 100.0%; Pred. No. 7.7e-16;
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                                                                                                                                                    Score 179; DB 4;
Pred. No. 7.7e-16;
                                                                                                                                     Mismatches
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; TOPOLOGY: ur
; MOLECULE TYPE:
US-08-474-349A-417
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Best Local Similarity 100.
Conservative
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                                                                                                                                                                                                                                        Sequence 61, Appli
Patent No. 6348568
APPLICANT: Barney, S.
APPLICANT: Guthrie, K.
APPLICANT: Merutka, G.
APPLICANT: Merutka, G.
APPLICANT: Lambert, M.
APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/082,279
PRIOR FILING DATE: 1998-05-20
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/474,349A
FILING DATE: 07-JUN-1995
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COMPUTER READABLE FORM:
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CORRESPONDENCE ADDRESS:
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TITLE OF INVENTION:
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REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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(212) 869-9741/8
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Lambert, Dennis M.
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Langlois, Alphonse J
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Pred. No. 7.7e-16;
); Mismatches 0;
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; OTHER INFORMATION: Core polypeptide US-09-315-304B-61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Core polypeptide US-09-315-304B-639
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 61
                                                                                                                                                                                                                                    Sequence 801, Application US/09315304B Patent No. 6348568
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/082,279
                                                            APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
                                                                                                                                     APPLICANT:
                                                                                                                                                         APPLICANT: Barney, S. APPLICANT: Guthrie, K. APPLICANT: Merutka, G.
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SOFTWARE: FastSEQ for Windows Version 3.0
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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7872-052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
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equence 639, Application US/09315304B
atent No. 6348568
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TYPE: PRT
ORGANISM: Artificial Sequence
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es 33; Conserv
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                                                                                                                                                                                                                    INFORMATION:
                                                                                                                                       Anwer, M.
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RESULT 12 US-08-554-616-73

Sequence 73, Application US/08554616

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; TOPOLOGY: ur
; MOLECULE TYPE:
US-08-073-028-73
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Best Local S
Matches 33
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                                                                                Query Match
Best Local Similarity
                                                                 Matches
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                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
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ORGANISM: Artificial Sequence
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                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 34 amino acids
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/0
FILING DATE: 07-UUN-1993
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
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TELEFAX: 66141 F
                                                                                                                                                                                                                                                                                                               NAME: Coruzzi, Laura A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 78
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: New York
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                                1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
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LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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(212) 869-8864/9741
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                                                               Score 179; DB 1;
Pred. No. 7.9e-16;
); Mismatches 0;
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US-08-554-616-73
                                 SOFTWARE: Fa
SEQ ID NO 800
LENGTH: 34
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Best Local Similarity
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APPLICANT:
                                                                                   CURRENT APPLICATION NUMBER: US/09/082,279B
CURRENT FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1515
                                                                                                                                         APPLICANT: Anwer, Mohmed
APPLICANT: Lambert, Dennis
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED
TITLE OF INVENTION: PHARMACOKINETIC PROPERTIES
FILE REFERENCE: 7872-043
                                                                                                                                                                                                                                                                                                                                         -09-082-279в-800
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ORGANISM: Artificial Sequence
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REGISTRATION NUMBER: 30,742
REFERENCE,DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 06-NOV-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/073,028
FILING DATE: 07-JUN-1993
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZÍ, LAUTA A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS LENGTH: 34 amino acid:
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MEDIUM TYPE: Floppy disk
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                    FastSEQ for Windows Version 3.0
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212) 869-8864/9741
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Pred. No. 7.9e-16;
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Best Local Similarity
Matches 33; Conserv
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LENGTH: 34
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Best Local :
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APPLICANT:
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                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
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NUMBER OF SEQ ID NOS: 1667
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/315,304B
CURRENT FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/082,279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Barney, S.
APPLICANT: Guthrie, K.
APPLICANT: Merutka, G.
APPLICANT: Anwer, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC TITLE OF INVENTION: PROPERTIES FILE REFERENCE: 7872-052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT ORGANISM: Artificial Sequence
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                TITLE OF INVENTION: SYNTHETIC PEPTIDE INHIBITORS OF HIV TITLE OF INVENTION: TRANSMISSION NUMBER OF SEQUENCES: 74
                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                      STREET: 1-1 York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ma
Local 5.
33;
                                                                                                                     STATE: New York
                                                                                                                                                                    ADDRESSEE:
                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                            1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                                                   10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 179; DB 4; Similarity 100.0%; Pred. No. 7.9e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6348568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lambert, D
                                                                                                                                                    1155 Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09315304B
                                                                                                   USA
                                                                                                                                                                                                                                                      Wild, Carl T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                      Bolognesi,
                                                                                                                                                                                                                                                                      Matthews, Thomas J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                    Pennie & Edmonds
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                                                                                                                                                      of the Americas
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Pred. No. 7.9e-16;
; Mismatches 0;
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APPLICATION NUMBER: US/08/073,028
FILING DATE: 07-JUN-1993
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: CORIZZI, Laura A.
REGISTRATION UNMBER: 7872-004-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 869-8864/9741
TELEPHONE: (212) 799-9909
TELEFAX: (212) 869-8864/9741
TELEEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 74:
SEQUENCE CHARACTERISTICS:
LENGTH: 35 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: periode
US-08-073-028-74

Ouery Match
PST Local Similarity 100.0%; Score 179; DB 1: Length 35;
PST Local Similarity 100.0%; Pred. No. 8.2e-16;
BST LOCAL Similarity 100.0%; Pred. No. 8.2e-16;
DST 11HSLIEESONQOEKNEOELLELDKWASLWNWF 33

OY 1 LIHSLIEESONQOEKNEOELLELDKWASLWNWF 33
DB 3 LIHSLIEESONQOEKNEOELLELDKWASLWNWF 35

Search completed: May 16, 2003, 11:22:12

Search completed: May 16, 2003, 11:22:12
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Database :
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB.seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    l number of hits satisfying chosen parameters:
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-623-533A-119
179
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     362588 seqs, 96450795 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   May 16, 2003, 11:20:00; Search time 14.4458 Seconds (without alignments)
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                                                                                                                                                                              /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/JS07_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/JS08_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/JS08_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/JS09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/JS09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/JS09_NEW_PUB.pep:*
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/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
                                                                                          /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
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and is derived by analysis of the total score distribution.

SUMMARIES

	19	18	17	16	15	14	13	12	11	10	9	8	7	6	U	4	ω	2		Result No.
	179	179	179	179	179	179	179	179	. 179	179	179	179	179	179	179	179	179	179	179	Score
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query Match Length
	268	268	268	. 256	254	232	221	177	56	46	37	36	36	36	36	. 36	36	36	36	Length I
	10	10	10	9	9	9	9	9	10	10	9	10	10	10	10	10	9	9	9	DB
	US-09-854-816-18	US-09-854-816-17	US-09-854-816-16	US-10-059-271-97	US-10-059-271-82	US-10-059-271-81	US-10-059-271-84	US-10-040-349B-2	US-09-779-451-4	US-09-779-451-41	US-09-848-616-176	US-09-854-816-108	US-09-854-816-1	US-09-834-628-1	US-09-779-451-5	US-09-796-202-10	US-09-493-346-1	US-10-116-797-1	US-09-874-475-16	ID
9	18	17,	Sequence 16, Appl	Sequence 97, Appl	Sequence 82, Appl		Ξ.	Sequence 2, Appli	4	Sequence 41, Appl	76,	Sequence 108, App	Sequence 1, Appli		Sequence 5, Appli	Sequence 10, Appl	Sequence 1, Appli	Sequence 1, Appli	Sequence 16, Appl	Description

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27 ·	26	25	24	23	22	21	20
170	170	170	170	170	170	170	170	170	170	170	170	171	173	176	176	179	179	179	179	179	179	179	179	179	179
95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.5	96.6	98.3	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
847	646	619	269	269	269	268	268	268	267	233	46	268	1231	268	36	1186	1101	861	856	853	519	391	345	345	344
10	10	10	10	10	10	10	10	10	10	10	10	10							10		10		10	9	
US-09-476-242-2	US-09-891-609-2	US-09-891-609-4	US-09-854-816-43	US-09-854-816-12	US-09-854-816-6	US-09-854-816-41	US-09-854-816-26	US-09-854-816-9	US-09-854-816-38	US-09-854-816-50	US-09-854-816-109	US-09-854-816-13	US-10-059-271-94	US-09-854-816-19	US-09-912-824-1	US-10-003-035-55	US-10-003-035-53	US-10-026-741-103	US-09-476-242-1	US-10-003-035-33	US-09-756-551A-8	US-10-059-271-93	US-09-779-451-8	US-10-026-741-49	US-10-040-349B-1
2	2,	Sequence 4, Appli	Sequence 43, Appl	12,	Sequence 6, Appli	Sequence 41, Appl		Sequence 9, Appli	38	50,	109	Sequence 13, Appl	Sequence 94, Appl	19	Sequence 1, Appli	55,	53,	03	Sequence 1, Appli			Sequence 93, Appl	Sequence 8, Appli	Sequence 49, Appl	Sequence 1, Appli

ALIGNMENTS

US-09-874-475-16

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US-10-116-797-1
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Sequence 1, Application US/10116797
Publication No. US20030044411A1
GENERAL INFORMATION:
APPLICANT: Olsen, William C.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: METHODS FOR INHIBITING HIV-1 INFECTION
FILE REFERENCE: 64672-A
CURRENT APPLICATION NUMBER: US/10/116,797
CURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/874,475
CURRENT FILING DATE: 2001-06-04
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16, Application US/09874475
Publication No. US20020182592A1
GENERAL INFORMATION:
APPLICANT: Petropoulos, Christos J.
APPLICANT: Parkin, Neil T.
APPLICANT: Whitcomb, Jeanette
APPLICANT: Whitcomb, Jeanette
APPLICANT: Huang, Wei
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 179; DB 9; Best Local Similarity 100.0%; Pred. No. 5.8e-15; Matches 33; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR EVALUATING VIRAL RECEPTOR/CO-RECETITLE OF INVENTION: AND INHIBITORS OF VIRUS ENTRY USING RECOMBINANT VIRUS ASSAYS FILE REFERENCE: 2793/65166
                                                                                                                                                                                                                                                                                                                                    Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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NUMBER OF SEQ ID NOS: 5

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: FEATURE:
; NAME/KEY: PEPTIDE
; LOCATION: (1)..(36)
; OTHER INFORMATION: T.
US-09-796-202-10
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; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: T20 peptide
US-09-493-346-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQ ID NO 1; LENGTH: 36; TYPE: PRT; ORGANISM: Homo sapiens US-10-116-797-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
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Best Local S
Matches 33
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CURRENT FILING DATE: 2000-01-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version 3.0
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 33; Conserv
Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                            APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 10, Application US/09796202
Patent No. US20020068813A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Compositions and Methods for Inhibition of HIV-1 TITLE OF INVENTION: Infection FILE REFERENCE: 61009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Olson, William C APPLICANT: Maddon, Paul J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       equence 1, Application US/09493346 blication No. US20030082185A1
                                                                                                                                                  LENGTH: 36
TYPE: PRT
ORGANISM: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match 100.0%;
Local Similarity 100.0%;
hes 33; Conservative C
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  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 179; DB 9; llarity 100.0%; Pred. No. 5.8e-15; Conservative 0; Mismatches 0;
                                                                              T-20
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 179; DB 9;
Pred. No. 5.8e-15;
D; Mismatches 0;
Score
Pred.
179; DB 10;
No. 5.8e-15;
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                Length 36;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: PRT ; ORGANISM: Human immunodeficiency virus type US-09-779-451-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
US-09-779-451-5
                                                                                                                                            US-09-834-628-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-834-628-1
                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09834628 Patent No. US20020119922A1
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn version 3.0 SEQ TD NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 5, Application US/09779451 Patent No. US20020094521A1
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                                                                       Matches
                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/834,628
CURRENT FILING DATE: 2001-04-16
PRIOR APPLICATION NUMBER: KR 00-65664
PRIOR FILING DATE: 2000-11-06
NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: YU, YEON GYU
APPLICANT: KIM, KEY-SUN
APPLICANT: JIN, BONG-SUK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: PEPTIDES FOR INHIBITION OF HIV INFECTION FILE REFERENCE: 05823.0198-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Wild, Carl T. APPLICANT: Allaway, Gra
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                                                                                                                                                           OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide , OTHER INFORMATION: DP178
                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                    LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 36
                                                               Match 100.0%;
Local Similarity 100.0%;
les 33; Conservative 0
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nes 33; Conserv
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LIHSLIEESQNQQEKNEQELLELDKWASLWNWF
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                                                                   Score 179; DB 10;
Pred. No. 5.8e-15;
Mismatches 0;
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                                                                                                                                                                                Sequence 108, Application US/09854816
Patent No. US20020151473A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 33; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                               4 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 36
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TELEPHONE: 650/225-8674
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/965,056 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
CLASSIFICATION: <UNknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                    TITLE OF INVENTION: Constrained Helical Peptides and Methods of
NUMBER OF SEQUENCES:
                                                                                                                                                            APPLICANT: Andrew C. Braisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2
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STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 36 amino acids
                                                                         J. Kevin Judice
Robert S. McDowell
J. Christopher Phelan
Melissa A. Starovasnik
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J. Kevin Judice
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J. Christopher Phelan
Melissa A. Starovasnik
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Making Same
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Pred. No. 5.8e-15;
); Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/848,616
CURRENT FILING DATE: 2001-05-05
NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 176
LENGTH: 37
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Best Local Similarity
Matches 33; Conserv
                                                     Best Local Similarity
                                                                     Query Match
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                                    Matches
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                                                                                                                                                                                                                                                                                                            APPLICANT: Tissot, Alain
APPLICANT: Lechner, Franziska
TITLE OF INVENTION: Molecular /
FILE REFERENCE: 1700.0180002
                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                             ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                    TYPE: PRT
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1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
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TELEPHONE: 650/225-8674
TELEFAX: 650/952-9881
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APPLICATION NUMBER: US/09/854,816
FILING DATE: 15-May-2001
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MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Torchia, PhD., Timothy E. REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: P1005R2
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STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                   Bachmann, Martin
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b. US20030054010A1
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                                    Conservative
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1 DNA Way
                                                     100.0%; Score 179; DB 9; 100.0%; Pred. No. 5.9e-15;
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Pred. No. 5.8e-1
                                    Mismatches
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                                                                   Length 37;
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RESULT 12
US-10-040-349B-2
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US-09-779-451-41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Human immunodeficiency virus type US-09-779-451-41
                                                                                                                                                                                                                                                                                                    JS-09-779-451-4
 Sequence 2, Application US/10040349B Publication No. US20030082521A1 GENERAL INFORMATION:
APPLICANT: Brasseur, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/779,451
CURRENT FILING DATE: 2001-08-17
PRIOR APPLICATION NUMBER: US 60/235,901
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: US 60/181,543
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 77
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APPLICANT: Allaway, Graham P.
TITLE OF INVENTION: Assay for Detection of Viral Fusion Inhibitors
FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/181,543 PRIOR FILLING DATE: 2000-02-10 NUMBER OF SEQ ID NOS: 77 SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Allaway, Graham P. TITLE OF INVENTION: Assay for FILE REFERENCE: 1900.0300003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wild, Carl T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.0 EQ ID NO 41
                                                                                                                                                                                                                                                                                                                  LENGTH: 56
TYPE: PRT
ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
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                                                                                                                                                   1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
                                                                                                                                                                                                                                              Local
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                                                                                                                                                                                                                                              Score 179; DB 10; Pred. No. 9.1e-15;
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                                                                                                                                                                                                                                                                 DB 10;
                                                                                                                                                                                                                                                             Length 56;
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                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                  Best Local
                                                                                                                                                                                                                                                                                                                   Query Match
                   APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEF
                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
INVENTION: PROTEIN
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RESULT 14
US-10-059-271-81
                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: peptide US-10-059-271-84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
US-10-059-271-84
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                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 84
LENGTH: 221
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:

APPLICANT: REPKE, HEINRICH
APPLICANT: BUDDE, ECKHARD
APPLICANT: NICOLAUS, STEFAN
TITLE OF INVENTION: PROTEIN HAVING MULTIPLE ANTIGEN/EPITOPE SEQUENCES
TITLE OF INVENTION: BEING IMMOBILIZED
FILE REFERENCE: ALBRE-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 2
SOFTWARE: PatentIn version 3.0
SEQ ID NO 2
GENERAL INFORMATION:
                Sequence 81, Application US/10059271 Publication No. US20030082208A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 84, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 17.9; DB 9; Best Local Similarity 100.0%; Pred. No. 2.9e-14; Matches 33; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: DE 101 06 295
PRIOR FILING DATE: 2001-02-02
NUMBER OF SEQ ID NOS: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/059,271 CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/040,349B CURRENT FILING DATE: 2002-07-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 01-078-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Polypeptide Inducing Antibodies Neutralizing HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: Peptide
LOCATION: (1)..(177)
OTHER INFORMATION: polypeptide derived from gp41 LAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 177
TYPE: PRT
ORGANISM: Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                         134 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            107 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 139
                                                                                                                                                           1 LIHSLIEESQNQQEKNEQELLELDKWASLWNWF 33
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                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                       Conservative
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Pred. No. 3
                                                                                                                                                                                                                       Mismatches
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HAVING

MULTIPLE ANTIGEN/EPITOPE SEQUENCES AND